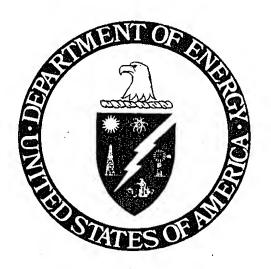
DOE/EIA-0208(82/28)

Energy Information Administration U.S. Department of Energy



# Weekly Petroleum Status Report

July 16, 1982

The "Weekly Petroleum Status Report" is published each Friday by the Energy Information Administration. The data contained in this report are based on company submissions for the week ending 7 a.m. the preceding Friday.

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The Weekly Petroleum Status Report (WPSR) provides timely information on the petroleum supply situation. It presents current statistics in the context of historical information, selected prices, and forecasts. The WPSR is intended to provide up-to-date information to the industry, the press, planners, policy-makers, consumers, analysts, and State and local governments.

# Highlights

### Refinery Operations

Crude oil inputs to refineries averaged 12.7 million barrels a day for the week ending July 9, 1982. Refinery capacity utilization stood at 72.2 percent during the week ending July 9, 1982. During the four weeks ending July 9, 1982, motor gasoline production averaged 6.7 million barrels a day and distillate fuel oil production averaged 2.8 million barrels a day.

#### Stocks

On July 9, 1982, stocks of crude oil stood at 353.9 million barrels, which is 1 percent below last week's level and 10 percent below the level a year ago. Stocks of motor gasoline, at 222.2 million barrels, were about 7 percent below the level of last year. Distillate fuel oil stocks stood at 129.5 million barrels, which is 6 percent above the level of last week and 29 percent below the level one year ago. Stocks of residual fuel oil stood at 60.2 million barrels, which is 5 percent above the level one week ago and 14 percent below the level of last year.

### **Imports**

Net imports of crude oil (including imports for the Strategic Petroleum Reserve) and petroleum products together averaged 4.4 million barrels a day for the four weeks ending July 9, 1982, about 12 percent below their average a year ago. Gross imports of crude oil (excluding the Strategic Petroleum Reserve) averaged 3.9 million barrels a day for the four week period ending July 9, 1982.

### **Products Supplied**

Total petroleum products supplied averaged 14.9 million barrels a day for the four-week period ending July 9, 1982, which is 7 percent lower than during the comparable period last year. Motor gasoline was supplied at a rate of 6.5 million barrels a day, which is 7 percent below the rate a year ago. Distillate fuel oil was supplied at a rate of 2.1 million barrels a day, 12 percent below the rate one year ago.

#### **Crude Oil Price**

The estimated weighted average international price of crude oil for July 1982 remains at \$33.13 a barrel.

### **Spot Market Product Prices**

For the week ending July 2, the average spot price of 98 octane gasoline on the Rotterdam market increased 29 cents to \$29.86 a barrel; the gasoil price increased 74 cents to \$37.27 a barrel, and the price of residual fuel oil decreased \$1.35 to \$27.10 a barrel. On the New York market, the average spot price of 89 octane regular gasoline increased 51 cents to \$40.07 a barrel; the No. 2 heating oil price decreased 32 cents to \$38.01 a barrel, and the price of residual fuel oil decreased \$1.25 to \$27.00 a barrel.

There are no changes available for spot prices on the New York and Rotterdam markets for the week ending July 9 since Oil Buyer's Guide, the official source of these prices, is not published the weeks following July 4 and December 25.

# Contents

U. S. Petroleum Balance Sheet
Refinery Operations U.S. Refinery Production by Product
Stocks Stocks of Crude Oil and Petroleum Products, U.S. Totals
Imports Imports of Crude Oil and Petroleum Products14 Gross Imports of Petroleum Products by Product15
Products Supplied Total Petroleum Products Supplied for Domestic Use
Prices World Crude Oil Prices
Weather Summary24
Appendices:  A: EIA Weekly Data: Data Collection and Method of Estimation
E: Calculation of World Oil Prices (page 19) 29  Definitions

	Four-Week A For Period I 7/ 9/82		Percent Change	Daily	lative Averages Days 1981	Percent Change
Crude Oil Supply (1) Domestic Production <sup>1</sup> (2) Net Imports (Incl. SPR) <sup>2</sup> (3) Gross Imports (Excl. SPR) (4) SPR Imports (5) Exports (6) SPR Stocks Withdrawn (+) or Added (-) (7) Other Stocks Withdrawn (+) or Added (-) <sup>3</sup> (8) Used Directly and Losses (9) Unaccounted-for Crude	E8,638 3,778 3,891 98 E211 -99 57 E-79 316	8,561 3,995 3,879 277 161 -402 237 -39 21	0.9 -5.4 0.3  31.1	E8,647 3,009 3,104 168 E263 -191 77 E-71 210	8,558 4,278 4,293 217 232 -306 -64 -29 106	1.0 -29.7 -27.7 13.4 
(10)Crude Oil Input to Refineries	12,611	12,373	1.9	11,681	12,543	-6.9
Other Supply (11) NGL Production (12) Other Hydrocarbon Input (13) Crude Used Directly as Product (14) Processing Gain (15) Net Product Imports (16) Gross Product Imports (17) Product Exports (18) Product Stocks Withdrawn (+) or Added (-)	E1,584 E53 E64 599 661 1,260 E599 -703	1,570 61 33 478 1,075 1,377 302 325	0.9 -13.1  25.3 -38.5 -8.5 98.3	E1,560 E47 E64 533 898 1,462 E564 606	1,577 47 24 501 1,239 1,557 318 297	-1.1 0.0  6.4 -27.5 -6.1 77.4
(19)Total Product Supplied for Domestic Use	14,869	15,915	-6.6	15,389	16,228	-5.2
Products Supplied (20) Motor Gasoline (21) Naphtha-type Jet Fuel (22) Kerosene-type Jet Fuel (23) Kerosene (24) Distillate Fuel Oil (25) Residual Fuel Oil (26) Other Oils	6,487 214 819 115 2,135 1,340 3,769	6,948 215 837 87 2,421 1,994 3,413	-6.6 -0.5 -2.2 32.2 -11.8 -32.8 10.1	6,428 206 795 142 2,842 1,814 3,162	6,543 198 814 126 2,932 2,174 3,441	-1.8 4.0 -2.3 12.7 -3.1 -16.6 -8.1
(27)Total Products Supplied	14,869	15,915	-6,6	15,389	16,228	-5.2
Petroleum Stocks (Millions of Barrels)	7/ 9/	82 7	/ 2/82	7/ 9/81	Percent C Previous Wee	hange from k Year Ago
Crude Oil (Exc]. SPR) <sup>6</sup> Motor Gasoline <sup>7</sup> Naphtha-type Jet Fuel Kerosene-type Jet Fuel Kerosene Distillate Fuel Oil Residual Fuel Oil Unfinished <sub>g</sub> Oils Other Oils	353 222 5 34 9 129 60 116 E197	,2 ,4 ,2 ,6 ,5 ,2	R356.3 R219.2 5.4 R33.3 9.9 R121.6 R57.4 R117.8 E195.6	392.3 237.9 6.0 39.2 13.2 181.9 69.9 126.1 207.4	-0.7 1.4 0.2 2.6 -3.7 6.4 4.9 -0.9	-9.8 -6.6 -10.3 -12.8 -27.4 -28.8 -13.8 -7.4 -4.9
Total Stocks (Excl. SPR) Crude Oil in SPR Total Stocks (Incl. SPR)	1,128 265 1,394	.2	264.1	1,273.8 165.7 1,439.5	1.0 0.4 0.9	-11.4 60.1 -3.1

R=EIA revision.

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R=EIA revision.

E=Estimate based on monthly data.

Includes lease condensate.

Net imports = Gross Imports (line 3) + SPR Imports (line 4) - Exports (line 5).

The December 1980 crude oil stocks level used in the calculation of the 1981 "Other Stocks Withdrawn or Added" is the 1981-basis crude oil stock level published in the July 1981 "Petroleum Statement, Monthly" (380.2 million barrels). The difference between the 1980- and the 1981-basis crude oil stock levels is the inclusion of crude oil in transit from Alaska in the figures for January 1981 forward. The December 1980 crude oil stock level shown on page 6 is the 1980-basis figure published in the 1980 "Petroleum Statement, Annual" and is consistent with other 1980 figures shown.

Includes unifinished oils and natural gas plant liquids for processing.

Includes an estimate of minor product stock change based on monthly data.

Includes stocks of finished motor gasoline and stocks of motor gasoline blending components.

Included are stocks of all other oils such as aviation gasoline, natural gas liquids (including ethane), petrochemical feedstocks, special naphthas; lube oils, wax, coke, asphalt; road oil, and miscellaneous oils. For the current two weeks, stocks of these minor products are estimated from monthly data.

1980: EIA, "Petroleum Statement, Annual (Final Summary)."

Sources:

• 1980: ETA, "Petroleum Statement, Annual (Final Summary),"

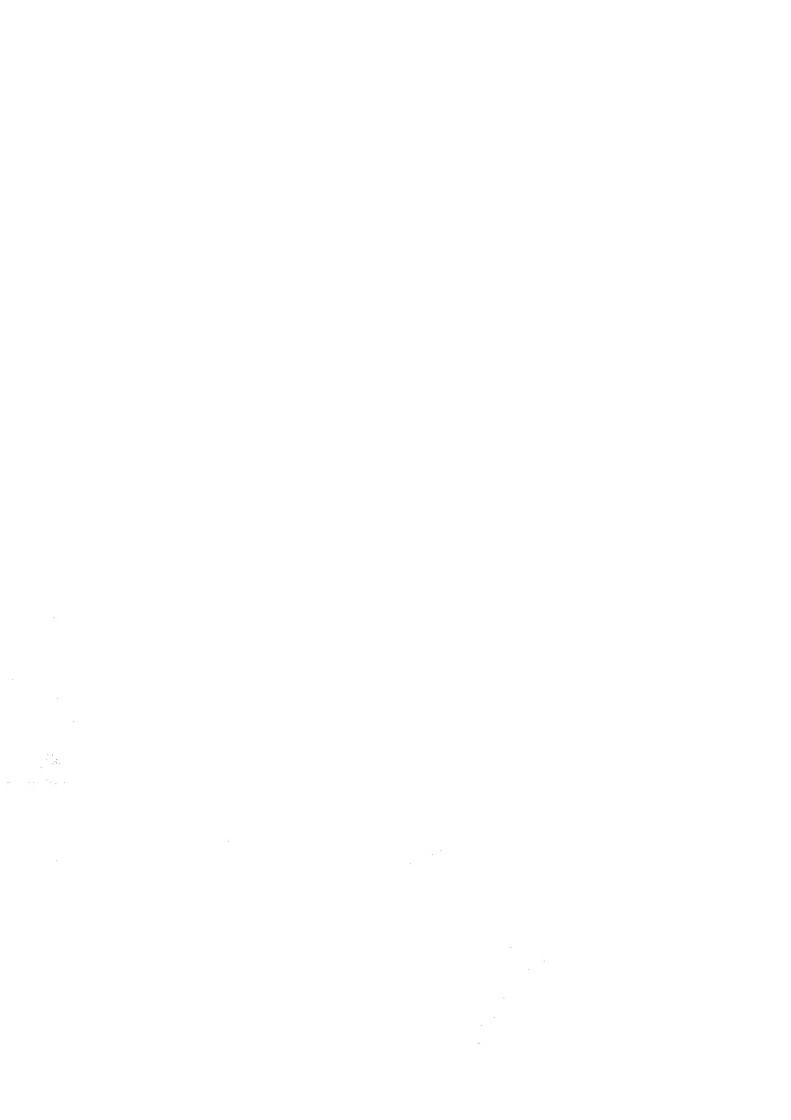
• 1981: ETA, "Petroleum Statement, Monthly."

• January-April 1982: EIA, "Petroleum Supply Monthly."

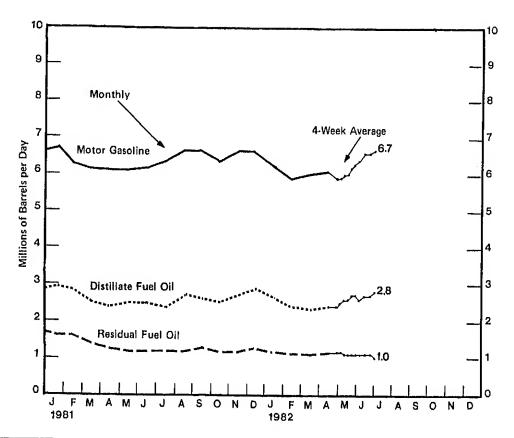
May 7, 1982-Current Week: Estimates based on ETA weekly data.

Note: Due to independent rounding, individual product detail may not add to total.

The percentages shown are calculated using unrounded numbers.



**U.S. Refinery Production by Product** (Millions of Barrels per Day)



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980									<del></del>	·	···	
Motor Gasoline	7.0	6,9	6.5	6,3	6,3	6.6	6.4	6.4	6.4	6.1	6.5	6.6
Jet Fuel	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Kerosene	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Distillate Fuel	3,0	2.8	2.6	2.5	2.5	2.6	2.7	2.5	2.7	2.6	2.7	2.9
Residual Fuel	1.8	1.8	1.6	1,6	1.5	1.6	1.5	1.4	1.5	1.5	1.6	1.7
1981 <sup>1</sup>												
Motor Gasoline <sup>2</sup>	6.7	6,3	6.2	6.1	6.1	6.2	6.4	6.6	6.6	6.4	0.0	0.0
Jet Fuel	1.0	0.9	1.0	1.0	1.0	1.0	1,0	1.0	6.6 0.9	6.4 0.9	6.6	6.6
Kerosene	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.9	0.9	1.0	0.9
Distillate Fuel <sup>2</sup>	3.0	2.8	2.5	2.4	2.5	2.5	2.4	2.7	2.6	2,5	0.1	0.1
Residual Fuel <sup>2</sup>	1.6	1.6	1.4	1.3	1.2	1.2	1.2	1.2	1.3	1,2	2.7 1.2	2.9 1.3
1982 <sup>1</sup>							• • •	, ,	.,.	1,2	* , 2	1.5
Motor Gasoline <sup>2</sup>	6,2	5.9	6,0	6.1								
Jet Fuel	0.9	1.0	1,1	1.0								
Kerosene	0.1	0.2	0.1	0.1								
Distillate Fuel <sup>2</sup>	2.6	2.4	2.3	2.4								
Residual Fuel <sup>2</sup>	1.2	1.1	1.1	1.2								
Average for Four-	Week P	eriod End	ina:				•					
1982 <sup>1</sup>	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9		
Motor Gasoline <sup>2</sup>	5.9	5.9	6.0	6,0	6.2	6,3	6.4	6.6	6.0			
Jet Fuel	1.0	0.9	0.9	0.9	0.9	0.9	0.9	6.6	6.6	6.7		
Kerosene	0.1	0.1	0.5	0.1	0.5	0.5	0.5	1.0 0.1	1.0	1.0		
Distillate Fuel <sup>2</sup>	2.4	2.5	2.6	2.6	2.7	2.7	2,6	2.7	0.1	0.1		
Residual Fuel <sup>2</sup>	1.2	1.2	1.1	1.1_	1.1	1.1	1.1		2.7	2.8 1.0		
	7.2	1.2	- 111	31.5	111 =		1.1	1.1	1.1	1,0		

<sup>1</sup> Production statistics represent net production (i.e., refinery output minus refinery input),
2 Production statistics for 1931 and 1932 should not be directly compared with those for prior years because, in January 1981, EIA modified its definitions for motor gesoline, distillate fuel oil, and residual fuel oil. See Appendix D for further explanation.

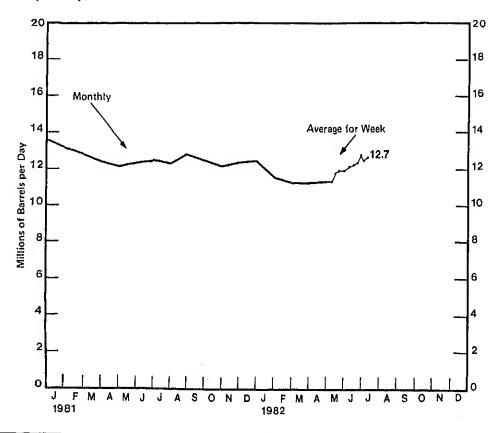
Source: • 1980: EIA, "Petroleum Statement, Annual (Finel Summery)."

• 1981: EIA, "Petroleum Statement, Monthity."

• January—April 1982: EIA, "Petroleum Supply Monthity."

• May 7, 1982—Current Week: Four-week averages based on EIA weekly data.

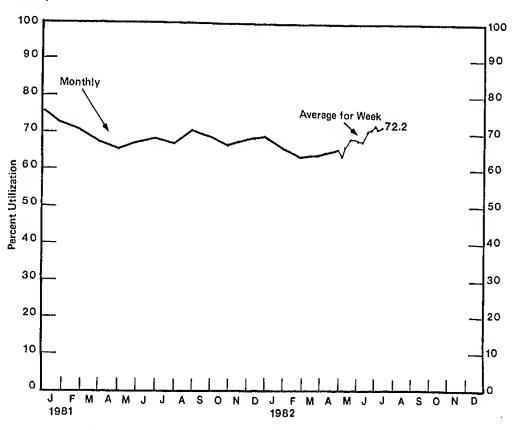
# Crude Oil Inputs to Refineries (Millions of Barrels per Day)



14.3 13.2	14.2 12.9	13.7	13.5	13,3	13.7	13.3	13.0	13.3	10.0	45.4	
13.2	12.9	10.4					10,0	13,3	12.8	13,1	13,6
		12.4	12.1	12.3	12.4	12.3	12.9	12.5	12,1	12,3	12.4
11.6	11.3	11.3	11.4								
leek End 5/7	ding: 5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9		
11,4	11.8	11.9	11.9	12.1	12,2	12.4	12.8	R12.5	12.7		
	eek End 5/7	eek Ending: 5/7 5/14	eek Ending: 5/7 5/14 5/21	eek Ending: 5/7 5/14 5/21 5/28	eek Ending: 5/7 5/14 5/21 5/28 6/4	eek Ending: 5/7 5/14 5/21 5/28 6/4 6/11	leek Ending: 5/7 5/14 5/21 5/28 6/4 6/11 6/18	leek Ending: 5/7 5/14 5/21 5/28 6/4 6/11 6/18 6/25	Teek Ending: 5/7 5/14 5/21 5/28 6/4 6/11 6/18 6/25 7/2	leek Ending: 5/7 5/14 5/21 5/28 6/4 6/11 6/18 6/25 7/2 7/9	leek Ending: 5/7 5/14 5/21 5/28 6/4 6/11 6/18 6/25 7/2 7/9

R=EIA revision.
Source: e 1980: EIA, "Petroleum Statement, Annuel (Final Summary),"
e 1981: EIA, "Petroleum Statement, Monthly,"
e January-April 1982: EIA, "Petroleum Supply Monthly,"
e May 7, 1982—Current Week: Estimates based on EIA weekly data,

# Refinery Capacity Utilization (Percent Utilization)



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980	82.1	79.9	76.8	75.7	74.8	77.0	74.5	72.7	73,6	70.6	73.0	75.5
1981	72.4	70.8	67.7	65.7	67.1	68.1	67.4	70.6	68.4	66.9	68,2	69,3
1982	66.3	64.6	64.9	65.5								
	or Week En	•										
1982	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9		
	64.6	8.88	68.2	67.9	67.8	70.5	71.1	72.8	R71.9	72.2		
	•				***************************************							

R=EIA revision.
Source: • 1980: EIA, "Petroleum Statement, Annual (Final Summary)."
• 1981: EIA, "Petroleum Statement, Monthly."
• January—April 1982: EIA, "Petroleum Supply Monthly."
• May 7, 1982—Gurrent Week: Estimates based on EIA weekly data,

# Stocks of Crude Oil and Petroleum Products, U.S. Totals (Millions of Barrels)

Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
					· · · · · · · · · · · · · · · · · · ·					·		
1980												
Crude Oil 2,3	357.5	366,0	367.4	379.8	383,4	381.5	378.7	387.2	376.4	378.5	373.1	358.2
Motor Gasoline Jet Fuel	262.1	274.4	282.7	271.8	263.1	264.8	260.7	259.0	258.1	246.4	257.2	261,3
Kerosene	38.4 14.0	38.3	38.7	39.3	41.3	42.3	40.9	40.3	42.2	43.1	43.9	42.0
Distillate Fuel Oil	212.4	13.3 191,6	13.1 177.8	13.4	13.8	13.9	14,3	13.3	12.9	12,5	12.7	11.6
Residual Fuel Oil	97.2	91.0	88.3	177.2 85.3	183,4 87,7	196,5 87,8	213.8	226.3	232.4	225.7	222.4	205.1
Unfinished Oils	112,4	111,3	116,9	123.5	130.6	133.1	85.6 131.6	86.9	87.9	91.0	93.2	91.8
Other Oils	165.9	166.3	172.7	185.6	192.4	199.8	208.5	129.6 214.7	132.1	131.1	126.3	123.9
Total Stocks (Excl. SPR)	1,260.0	1,252.1	1,256,7	1,275,9	1,295.6	1,319.7	1,334,2	1,357.4	212.4 1,354.3	204.8	201.4	190.5
Crude Oil in SPR	91.2	91.2	91.2	91,2	91.2	91.2	91.2	91.2	92.8	1,333.0 96.6	1,330,1 102,3	1,284.4
Total Stocks (Incl. SPR)	1,351.2	1,343.3	1,347,8	1,367.1	1,386.8	1,410.9	1,425.4	1,448.6	1,447.2	1,429.7	1,432.4	107,8 1,392,2
1981												
Crude Oil <sup>2</sup>	381.5	386.8	397,2	407.2	402.3	392,2	392.5	365.2	361.4	369.5	372.3	368.5
Motor Gasoline <sup>4</sup>	276,5	284.1	284,9	271.8	258.2	241.7	227.1	232.5	237.0	235.0	247.4	251.4
Jet Fuel	39,5	38.7	39,2	40.7	44.7	45.4	44.9	44,9	43.3	42.8	41.9	40.5
Kerosene Distillate Fuel Oil	10.5	10.4	11,0	11.9	12.6	13.2	13.2	13.6	13.8	12,5	12.4	11.1
Residual Fuel Oil	180.0 82.3	172,5	164.6	164,6	171.9	180.2	186.7	200,3	206.8	201.1	200.0	190.2
Unfinished Oils	121.4	78.2 122,2	74.9	73.0	78.5	70.1	69,3	74.8	80.0	79.8	80.8	78.3
Other Oils	191,7	188,7	126.0 186.8	126.4	126.2	126.1	126.1	124.5	118,5	119.2	116.4	112.0
Total Stocks (Excl. SPR)	1,283,4	1,281,5	1,284.7	193.6 1,289.2	202,5 1,296,9	206,0	210.8	217,8	220.6	213,5	212.3	206.2
Crude Oil in SPR	112.4	116.1	120.9	134,2	150.1	1,274.9	1,270.7	1,273,6	1,281.4	1,273.5	1,283.6	1,258,2
Total Stocks (Incl. SPR)	1,395.9	1,397.6	1,405.5	1,423.4	1,446.9	163.1 1,438.0	173.1 1,443.8	184.7 1,458.3	199.2 1,480.7	214.8 1,488,3	222.5 1,506.2	230,3 1,488.5
1982									·	•		,,,,,,,,,
Crude Oil <sup>2</sup>	370.9	371.0	365.7	355.5								
Motor Gasoline 4	262.1	262.1	247.9	222.8								
Jet Fuel	37.2	37.0	42.5	44.1								
Kerosene	9,6	9,1	8.8	9,6								
Distillate Fuel Oil	166.0	146.7	127.7	108.8								
Residual Fuel Oil	68.2	58.1	57.3	53.6								
Unfinished Oils	116.7	116.9	115.8	118,9								
Other Oils	195.0	189.3	186,6	180.9								
Total Stocks (Excl. SPR)	1,225.6	1,190.2	1,162.4	1,094,3								
Crude Oil in SPR	235.3	241.2	248.5	255,5								
Total Stocks (Incl. SPR)	1,460.9	1,431.4	1,400.9	1,349.9								
Week Ending; 1982	6/7	5/14	5/21	5/28	6/4	D14.4	Cian	o inc	= 10			
						6/11	6/18	6/25	7/2	7/9		
Crude Oil <sup>2</sup>	367.1	361.9	367.4	360.6	357.2	355,5	358.3	360.9	R356,3	353.9		
Motor Gasoline4 Jet Fuel	218.1	214.4	209.4	209.5	209,5	211.4	215,1	217.4	R219.2	222.2		
Kerosene	42.6 9.7	42.4 10.2	41.0	41,6	41.1	41.1	40.7	40,6	R38.7	39.6		
Distillate Fuel	106.9	106.6	9.5 104.8	9,3 106,6	9,3	9,3	9.5	9.6	9,9	9.6		
Residual Fuel	51.6	55.4	57.6	56.0	109,6 56,8	111.0 57.9	114.1	119.0	R121.6	129,5		
Unfinished Oils	118.8	119.B	116.9	118.9	117.3	119.5	55.6 114.1	55.5 118.3	R57.4	60.2		
Other Olls 5	E195.7	E197,5	E200.3	E202,3	E204.0	E205,3	E206.6	E194.3	R117.8 E195.6	116.8 E107.2		
Total Stocks (Excl. SPR)	1,110.5	1,108.2	1,106.9	1,104.8	1,104.8	1,110.8	1,114,0	1,115,7	R1,116,7	E197,2		
Crude Oil In SPR	255,5	255.6	258.0	259.8	261.3	262.4	262,6	263,5	264.1	1,128.9 265.2		
Total Stocks (Incl. SPR)	1,366,0	1,363.7	1,364.9	1,364.6	1,366.1	1,373,3	1,376,6	1,379,2	R1,380.8	1,394.1		
		.,		. , , ,	.,-30,,	. 101 010	1,107010	101012		110041		

R=EIA revision.

R=EIA revision.

1 Product stocks include those stocks held at refineries, in pipelines, and at major bulk terminals. Stocks held at netural gas processing plants are included in "Other Oils" and in totals. All stock levels are as of the end of the period.

2 Crude oil stocks include those stocks held at refineries, in pipelines, in lease tanks, and in transit to refineries, and do not include those held in the Strategic Petroleum Reserve.

3 The December 1980 crude oil stock level shown here is from the 1980 "Petroleum Statement, Annual" and is not the same as the 1981—basis crude oil stock level used in the calculations for the U.S. Petroleum Balance Sheet (see footnote 3, page 1).

4 Motor gesoline stocks are the sum of stocks of finished motor gesoline attocks of motor gesoline blending components, shown in the "Petroleum Statement, Monthly." The 1981 and 1982 weekly motor gesoline stocks setistics are comparable to the 1981 and 1982 monthly statistics.

5 Weakly totals for stocks of other oils, which include evistion gesoline, athans, petrochemical feedstocks, special naphthas, lube oil, wex, coke, asphalt, road oil, and miscellaneous oils, are estimated using monthly data.

Source: • 1980: EIA, "Petroleum Statement, Annual (Finel Summary)."

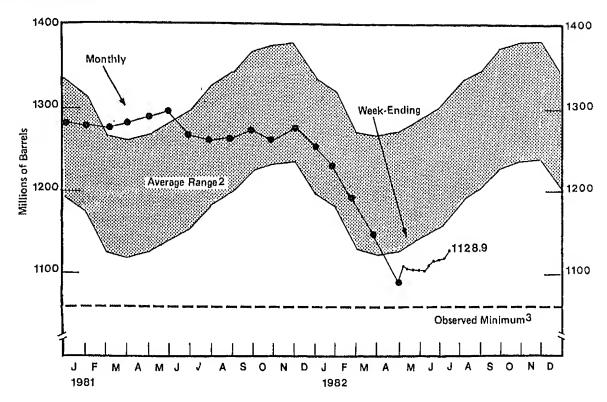
• January—April 1982: EIA, "Petroleum Supply Monthly."

• January—April 1982: EIA, "Petroleum Supply Monthly."

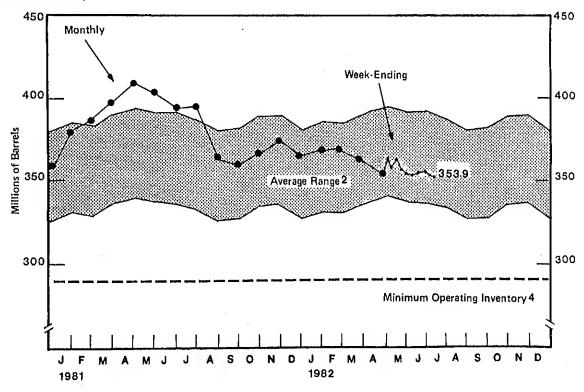
• January—April 1982: EIA, "Petroleum Supply Monthly."

• May 7, 1982—Current Week: Estimates based on EIA weekly data.

# Stocks of Crude Oil<sup>l</sup>and Petroleum Products, U.S. Total (Millions of Barrels)



Stocks of Crude Oil, U.S. Total (Millions of Barrels)



1 Excludes stocks held in the Strategic Petroleum Reserve and Includes crude oil in transit to refineries,
2 Average level, width of average range, and observed minimum are based on three years of monthly data: Jenuary 1978—December 1981. The seasonal pattern is based on seven
years of monthly data: Jenuary 1974—December 1980.
3 The observed minimum for total stocks (1059,9) occurred in March 1979.
4 The National Petroleum Council defines the Minimum Operating Inventory as the minimum level required for routine operation, By their definition, runouts and shorteges would
occur if Inventory levels fell below that level (290 million barrels for crude oil).
Source: e Ranges and Seasonal Patterns: 1974—1980, EIA, "Petroleum Statement, Annual (Final Summary)." 1981, EIA, "Petroleum Statement, Monthly."

• Monthly Data: 1981, EIA, "Petroleum Statement, Monthly," January—April 1982, EIA, "Petroleum Supply Monthly."

• May 7, 1982—Current Week: Estimates based on EIA weekly data.

# Stocks of Motor Gasoline by District 1 (Millions of Barrels)

Year/District	Jan	F.·				· · ·		***************************************				<u> </u>
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980												
East Coast (PAD 1)	70.2	75.0	73.7	74.8	75.2	76.4	70.0	70.0				
Midwest (PAD 2)	83.1	85.0	89.0	83.3			72.9	72.8	75.7	69,9	69,2	71.1
Gulf Coast (PAD 3)	69.8	73.7	80.9		76.9	79.1	78.9	76.8	77.5	70.9	72,8	76.9
Rocky Mountain (PAD 4)				75.7	74.3	73.2	73.2	71.4	68.3	69.8	75.8	73.8
West Coast (PAD 5)	8.8	9,3	9.7	9.4	8.9	8.4	6.6	6.5	6.2	6.6	7.8	8.6
Host Godst (FAD 5)	30.3	31.4	29.4	28,6	27.8	27.9	29.1	30.2	30.5	29,2	31.6	31.0
Total U.S. <sup>2</sup>	262,1	7744	000 7	074.0							*****	01,0
	202,1	274.4	282.7	271.8	263.1	264.8	260.7	259.0	258.1	246.4	257,2	261.3
1981												
East Coast (PAD 1)	71.7	74.2	70.4	77.0	70.0							
Midwest (PAD 2)	86.4		79.4	77.6	72.9	69.4	62,3	63.8	69.5	69,3	69.7	69.3
Gulf Coast (PAD 3)		90.5	89,7	84.2	80.1	72.4	65,8	66,5	65.3	65.8	69.1	72,6
Rocky Mountain (PAD 4)	77.6	79.6	78.6	76.3	72.3	66.1	63,9	68.6	68.4	64,7	70.0	69.6
Most Cost (DAD E)	9.7	10.3		9.4	8.6	7.4	6.5	6.0	5.9	6.3	7.7	8,5
West Coast (PAD 5)	31,5	29.5	26,9	24.4	24.3	26.4	28.6	27.7	28.0	28.8	30.9	31.4
Total U.S. <sup>2</sup>	220 5	0044								20.0	00.0	01,4
	276.5	284.1	284.9	271.8	258.2	241.7	227.1	232.5	237.0	235,0	247.4	251.4
1982												
East Coast (PAD 1)	71 7	00.0	07.4									
Midwest (PAD 2)	71.7	69.6	67.1	61.7								
Gulf Cook (DAD 0)	78.6	79.1	74.8	63.2								
Gulf Coast (PAD 3)	70,2	69.2	68,0	63.4								
Rocky Mountain (PAD 4)	9.6	9.9	10.1	8.9								
West Coast (PAD 5)	32.0	34,3	27.8	25.5								
Total U.S. <sup>2</sup>	0.00											
10141 0.5.	262,1	262.1	247,9	222.8				·				
Week Ending:									•			
1982	5/7	E /4 A	F 104	- (								
	0//	5/14	5/21	5/28	6/4	6/1 <b>1</b>	6/18	6/25	7/2	7/9		
East Coast (PAD 1)	60.9	61.6	61,8	01.0	04.0							
Midwest (PAD 2)	63.1	59.4		61.3	61.8	64.7	63.9	65.1	R67.5	68.3		
Gulf Coast (PAD 3)			55.6	55,1	54.7	54.3	57.6	58.2	R58.3	59.9		. •
Rocky Mountain (PAD 4)	62.5	62.8	61.4	63.8	64.2	62.9	64:9	63.0	R62.5	63.0		
West Coast (PAD 5)	8.3	8.0	7.9	7.7	7.4	7.3	6.9	6.6	6.6	6.2		
rivat odast (FAD 8)	23,3	22.6	22.7	21.5	21,5	22.2	21.8	24.5	R24.3	24.8		
Total U.S. <sup>2</sup>	210.1	0144	000 4						114-114	27.0		
	218.1	214.4	209.4	209,5	209.5	211.4	215.1		R219.2	222.2		

R=EIA revision.

1 Districts are Petroleum Administration for Defense (PAD) Districts.

2 PAD district data may not add to total due to independent rounding.

Source: • 1980 Totals: EIA, "Petroleum Statement, Annual (Final Summary),"

• 1980 Regional Data: Unpublished data based on "Petroleum Statement, Annual (Final Summary),"

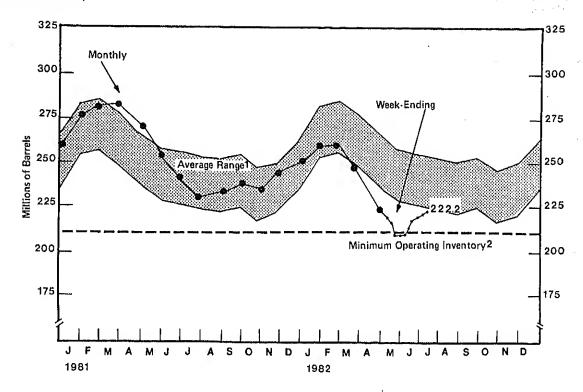
• 1981: EIA, "Petroleum Statement, Monthly."

• January—April 1982: EIA, "Petroleum Supply Monthly,"

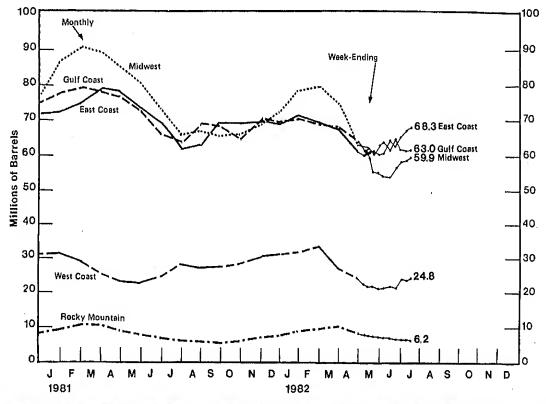
• May 7, 1982—Current Week: Estimates based on EIA weekly data,

Note: Motor gasoline stocks are the sum of stocks of finished motor gasoline and stocks of motor gasoline blending components.

### Stocks of Motor Gasoline, U.S. Total (Millions of Barrels)



### Stocks of Motor Gasoline by District (Millions of Barrels)



<sup>1</sup> Average level and width of average range are based on three years of monthly data: January 1979—December 1981, The seasonal pattern is based on five years of monthly data: January 1976—December 1975 and January 1978—December 1980,

2 The National Petroleum Council defines the Minimum Operating inventory as the minimum level required for routine operation. By their definition, runouts and shortages would occur if inventory levels fell below that level (210 million barrels for motor gasoline).

Source: • Ranges and Seasonal Patterns: 1974—1980, EIA, "Petroleum Statement, Annual (Final Summary);" 1981, EIA "Petroleum Statement, Monthly,"

• Monthly Data: 1981, EIA, "Petroleum Statement, Monthly;" January—April 1982, EIA, "Petroleum Supply Monthly."

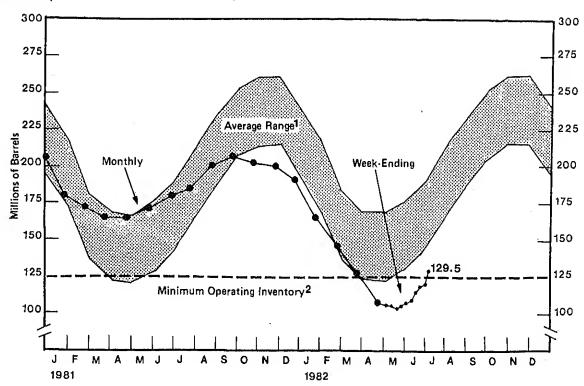
• May 7, 1982—Current Week: Estimates based on EIA weekly data.

Note: Motor gasoline stocks are the sum of stocks of finished motor gasoline and stocks of motor gasoline blending components.

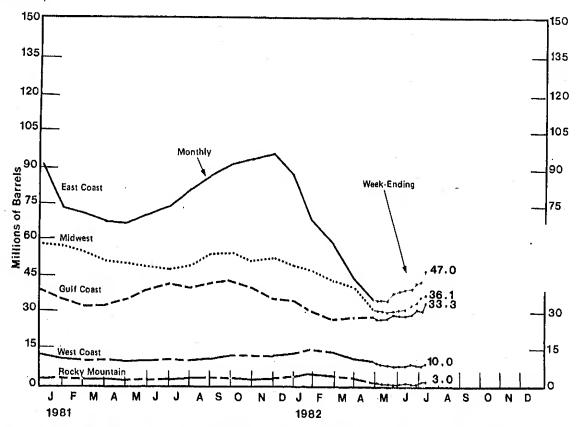
Stocks of Distillate Fuel Oil by District<sup>1</sup> (Millions of Barrels)

Year/District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980												•
East Coast (PAD 1)	92.1	77.9	67.1	71.4	78.0	85.8	96.0	104,	100 0	100 5	400.0	
Midwest (PAD 2)	65.5	61.1	57.3	55.7	54.3	56.8	60.2				103,3	90.
Gulf Coast (PAD 3)	38.7	36.1	36.8	33.5	34.7			62.4		57.4	58.2	58.
Rocky Mountain (PAD 4)	3,5	3.7	3,9			38.4	41.2	42.9		46.1	44.2	39.
West Coast (PAD 5)	12.6	12.8		3.9	3.8	3.5	3.9	3.9		3.3	3.3	3,
	12,0	12.0	12.8	12.8	12.6	12.1	12.6	13.0	12,4	12.3	13.4	13.
Total U.S. <sup>2</sup>	212.4	191.6	177.8	177.2	183.4	196.5	212.0	226.5	000.4	005 7	000.4	
	_,_,,	12.,0	17710	177.2	100,4	190.0	213.8	226.3	232.4	225.7	222.4	205.
1981											1	
East Coast (PAD 1)	72.2	69.7	64.9	64.4	68,2	73,6	81.7	06.0	00.0	04.0	ar a	
Midwest (PAD 2)	57.9	56.1	52.5	52.4	50.6	48.8		86.3	, -	94.9	95.8	87.
Gulf Coast (PAD 3)	34.1	32.4	32.5				49.8	54.3		50,9	51.8	49.
Rocky Mountain (PAD 4)	3.4	3.3		34.7	39,2	43.2	40.8	44.6		40.0	36.8	35.
West Coast (PAD 5)			3.3	2.9	3.2	3.4	3.7	3.8	3.6	3,3	3.6	3,
rest doust (FAD 5)	12.4	11.1	11.4	10,3	10.6	11,1	10.8	11,3	12.0	12.0	12.0	13.
Total U.S <sup>2</sup>	180.0	172,5	164.6	164,6	171.9	180,2	186.7	200.3	206.8	201.1		
1982							100,7	200.3	200.0	201.1	200.0	190.2
East Coast (PAD 1)	69.2	58.4	44.9	35,1								
Midwest (PAD 2)	47.4	43,8	40.2	31.2								
Gulf Coast (PAD 3)	30.8	26.7	27.5	28.2								
Rocky Mountain (PAD 4)	4.1	3.9	3.7	3,1								
West Coast (PAD 5)	14.5	13.9	11,4	11.1	•							
Total U.S. <sup>2</sup>	166.0	146.7	127.7	108.8								
Week Ending:												
1982	- /-											
1982	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9		
East Coast (PAD 1)	35,0	35.0	34.9	36.4	38.3	20.0	20.0	4.5				
Midwest (PAD 2)	31.2	30.9	29,7			39.3	39,9	42.4	R42.9	47.0		
Gulf Coast (PAD 3)	27,1			29.9	30.9	31.1	32.2	33,3	R36.7	36.1		
Rocky Mountain (PAD 4)		27.5	27.8	28.7	28.3	28.4	29.0	30.7	R30.4	33.3		
Nocky Wountain (PAD 4)	3,3	2.9	2.9	2.6	2.8	2.9	2.7	2.7	3.0	3.0		
West Coast (PAD 5)	10.4	10.2	9.6	9.0	9.2	9.2	10.3	9.9	R9.7	10.0		
Total U.S. <sup>2</sup>	106.9	106.6	104.8	106.6	109.6	111.0	114,1	119.0	R121,6	129.5		
R-EIA revision. Districts are Petroleum Administration PAD district data may not add to total source: e 1980 Totals: EIA, "Petroleum e 1980 Regional Data: Unpubli e 1981: EIA, "Petroleum Stater a January—April 1982: EIA, " e May 7, 1982—Current Week: I	due to indepe Statement, A shed data base nent, Monthly Setroleum Sur	ndent roundir Annuel (Fine) ed on "Petrole /."	ng. Summery)," um Statemen					110.0		129,0		

# Stocks of Distillate Fuel Oil, U.S. Total (Millions of Barrels)



### Stocks of Distillate Fuel Oil by District (Millions of Barrels)



Average level and width of average range are based on three years of monthly data: January 1979—December 1981. The seasonal pattern is based on seven years of monthly data: January 1974—December 1980.

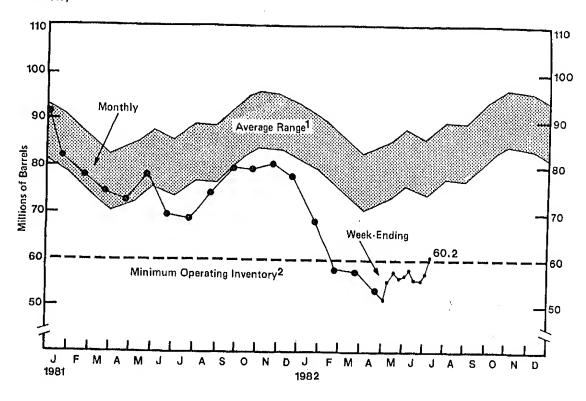
The National Petroleum Council defines the Minimum Operating Inventory as the minimum level required for routine operation. By their definition, runouts and shortages would occur if inventory levels fell below that level (125 million barrels for distillate fuel oil), ourse: e Ranges and Seasonal Patterns: 1975—1980, EIA, "Petroleum Statement, Annual (Final Summary);" 1981, EIA, "Petroleum Statement, Monthly."

• May 7, 1982—Current Week: Estimates based on EIA weekly data,

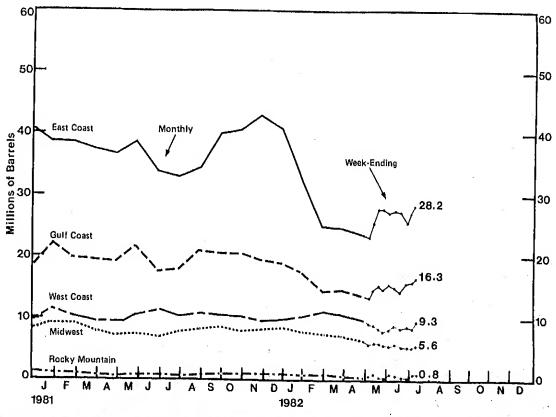
Stocks of Residual Fuel Oil by District<sup>1</sup> (Millions of Barrels)

45.1 10.9 18.9 0.8 12.0 87.8 33.7 7.0 17.4 0.6 11.3 70.1	44.0 9.8 19.4 0.9 11.6 85.6 32.9 7.7 17.7 0.5 10.4 69.3	43.6 9.3 21.0 0.9 12.0 86.9 34.3 8.2 21.0 0.6 10.7 74.8	43.8 8.9 22.3 0.9 12.0 87.9 40.0 8.5 20.4 0.7 10.5	45.9 9.0 23.0 0.8 12.3 91.0 40.4 7.8 20.4 0.7 10.4 79.8	46.5 8.6 25.2 0.9 12.1 93.2 43.0 8.1 19.4 0.7 9.6 80.8	23. 0. 12. 91. 40. 8. 18.9 9.6
10.9 18.9 0.8 12.0 87.8 33.7 7.0 17.4 0.6 11.3	9.8 19.4 0.9 11.6 85.6 32.9 7.7 17.7 0.5 10.4	9.3 21.0 0.9 12.0 86.9 34.3 8.2 21.0 0.6 10.7	8.9 22.3 0.9 12.0 87.9 40.0 8.5 20.4 0.7 10.5	9.0 23.0 0.8 12.3 91.0 40.4 7.8 20.4 0.7 10.4	8.6 25.2 0.9 12.1 93.2 43.0 8.1 19.4 0.7 9.6	9. 23. 0.3 12.0 91.3 40.6 8.3 18.9 9.8
18.9 0.8 12.0 87.8 33.7 7.0 17.4 0.6 11.3	19.4 0.9 11.6 85.6 32.9 7.7 17.7 0.5 10.4	21.0 0.9 12.0 86.9 34.3 8.2 21.0 0.6 10.7	22.3 0.9 12.0 87.9 40.0 8.5 20.4 0.7 10.5	23.0 0.8 12.3 91.0 40.4 7.8 20.4 0.7 10.4	25.2 0.9 12.1 93.2 43.0 8.1 19.4 0.7 9.6	23. 0. 12. 91. 40. 8. 18. 0.
0.8 12.0 87.8 33.7 7.0 17.4 0.6 11.3	0.9 11.6 85.6 32.9 7.7 17.7 0.5 10.4	0.9 12.0 86.9 34.3 8.2 21.0 0.6 10.7	0.9 12.0 87.9 40.0 8.5 20.4 0.7 10.5	0.8 12.3 91.0 40.4 7.8 20.4 0.7 10.4	0.9 12.1 93.2 43.0 8.1 19.4 0.7 9.6	0. 12. 91. 40. 8. 18. 0.
12.0 87.8 33.7 7.0 17.4 0.6 11.3	11.6 85.6 32.9 7.7 17.7 0.5 10.4	12.0 86.9 34.3 8.2 21.0 0.6 10.7	12.0 87.9 40.0 8.5 20.4 0.7 10.5	12.3 91.0 40.4 7.8 20.4 0.7 10.4	12.1 93.2 43.0 8.1 19.4 0.7 9.6	12. 91. 40. 8. 18. 0. 9.
87.8 33.7 7.0 17.4 0.6 11.3	32.9 7.7 17.7 0.5 10.4	34.3 8.2 21.0 0.6 10.7	87.9 40.0 8.5 20.4 0.7 10.5	91.0 40.4 7.8 20.4 0.7 10.4	93.2 43.0 8.1 19.4 0.7 9.6	91. 40. 8. 18. 0.
33.7 7.0 17.4 0.6 11.3	32.9 7.7 17.7 0.5 10.4	34.3 8.2 21.0 0.6 10.7	40.0 8.5 20.4 0.7 10.5	40.4 7.8 20.4 0.7 10.4	43.0 8.1 19.4 0.7 9.6	40. 8. 18. 0. 9.
7.0 17.4 0.6 11.3	7.7 17.7 0.5 10.4	8.2 21.0 0.6 10.7	8.5 20.4 0.7 10.5	7.8 20.4 0.7 10.4	8.1 19.4 0.7 9.6	8.3 18.9 0.3 9.9
7.0 17.4 0.6 11.3	7.7 17.7 0.5 10.4	8.2 21.0 0.6 10.7	8.5 20.4 0.7 10.5	7.8 20.4 0.7 10.4	8.1 19.4 0.7 9.6	8.3 18.9 0.3 9.9
7.0 17.4 0.6 11.3	7.7 17.7 0.5 10.4	8.2 21.0 0.6 10.7	8.5 20.4 0.7 10.5	7.8 20.4 0.7 10.4	8.1 19.4 0.7 9.6	8. 18. 0. 9.
17.4 0.6 11.3	17.7 0.5 10.4	21.0 0.6 10.7	20.4 0.7 10,5	20.4 0.7 10.4	19.4 0.7 9.6	18.9 0.1 9.1
0.6 11.3	0.5 10.4	0.6 10.7	0.7 10.5	0.7 10.4	0.7 9.6	0. 9.
11.3	10.4	10.7	10.5	10.4	9.6	9.9
70.1	69.3	74.8	80.0	79.8	80.8	78.3
C/11	CIAO	0/05	7/0	= (0		
6/11	6/18	6/25	7/2	7/9		
27.5	27.3	25.6	R27.2	28,2		
5.8	5.4	5.4				
15.0						
8.8	8.2	8.6	8.3	9.3		
57.9	65.6	55.5	R57.4	60.2		
•	5.8 16.0 0.7	5.8 5.4 16.0 14.3 0.7 0.5 8.8 8.2 57.9 55.6	5.8       5.4       5.4         16.0       14.3       15.5         0.7       0.5       0.5         8.8       8.2       8.6         57.9       55.6       55.5	5.8 5.4 5.4 5.3 16.0 14.3 15.5 R15.8 0.7 0.5 0.5 0.8 8.8 8.2 8.6 8.3 57.9 65.6 56.5 R57.4	5.8     5.4     5.4     5.3     5.6       15.0     14.3     15.5     R15.8     16.3       0.7     0.5     0.5     0.8     0.8       8.8     8.2     8.6     8.3     9.3       57.9     55.6     55.5     R57.4     60.2	5.8 5.4 5.4 5.3 5.6 16.0 14.3 15.5 R15.8 16.3 0.7 0.5 0.5 0.8 0.8 8.8 8.2 8.6 8.3 9.3 57.9 55.6 55.5 R57.4 60.2

# Stocks of Residual Fuel Oil, U.S. Total (Millions of Barrels)



Stocks of Residual Fuel Oil by District Millions of Barrels)



tverage level and width of average renge are based on three years of monthly data: January 1979—December 1981. The seasonal pattern is based on seven years of monthly data: anuary 1974—December 1980.

The National Petroleum Council defines the Minimum Operating Inventory as the minimum level required for routine operation. By their definition, runouts and shortages would occur inventory levels fell below that level (60 million barrels for residual fuel oil).

The seasonal pattern is based on seven years of monthly data: 1800 million barrels for residual fuel oil).

The seasonal pattern is based on seven years of monthly data: 1800 million barrels for residual fuel oil).

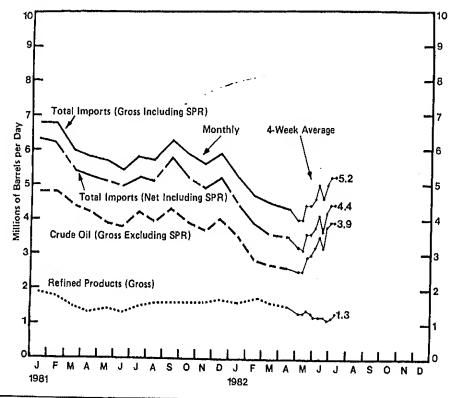
The seasonal pattern is based on seven years of monthly data: 1800 million barrels for residual fuel oil).

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The seasonal pattern is based on seven years of monthly data: 1800 million barrels for residual fuel oil).

The seasonal pattern is based on seven years of monthly data: 1800 million barrels for residual fuel oil).

### Imports of Crude Oil and Petroleum Products (Millions of Barrels per Day)



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980									***	-		
Crude Oil (Excl. SPR)	6.4	6.0	5.7	5.6	5.1	5.5	4.0	4.0				
SPR	0	0	0	0	0	0.0	4.8	4.8	4.7	4.6	4.5	4.9
Refined Products	2.2	1.9	1.8	1.5	1.5	_	0	0	0.1	0.1	0.1	0,2
Total (Gross Incl. SPR)	8.6	7.9	7.5	7.1	6,6	1.4	1.4	1.4	1.5	1.6	1.7	1.8
Total Exports <sup>1</sup>	0.5	0,6	0.6	0.4	0,6	6.9	6,3	6,2	6,2	6.4	6.4	6,9
Total (Net Incl. SPR)	8.0	7.4	6.9	6.7	6.0	0.7 6.2	0,5 5,7	0,3 5.9	0.6 5.7	0,6 5,8	0,5 5.9	0,6 6,3
1981								-:-		0,0	0.0	0,5
Crude Oil (Excl. SPR)	4.8	4.8	4.4	4.0	0.0	0.0						
SPR	0.1	0.1	0.1	4.2	3,9	3.8	4.2	3,9	4,3	3,9	3.7	4.0
Refined Products	1.9	1.9	1.5	0.3	0.4	0,3	0,2	0.3	0.4	0,5	0.3	0,2
Total (Gross Incl. SPR)	6.8	6,8	6.0	1,3	1.4	1.3	1.5	1.6	1.6	1.6	1.6	1.7
Total Exports <sup>1</sup>	0.6	0.6		5.8	5.7	5.4	5.8	5.7	6,3	5.9	5,6	5,9
Total (Net Incl. SPR)	6.3	6,2	0.6 5.4	0.6	0.6	0.4	0.6	0.6	0,5	0,7	0.7	0.7
	0.0	0,2	0,4	5.2	5.1	5.0	5.2	- 5.1	5,8	5.2	4.9	5.2
1982											.,_	
Crude Oil (Excl. SPR)	3,5	2.8	2.7	2.6								
SPR	0.2	0.2	0.2	0.2								
Refined Products	1.6	1,7	1,6	1.5								
Total (Gross Incl. SPR)	5,2	4.7	4,5	4.3								
Total Exports <sup>1</sup>	0.8	0.8	0.9	0.8								
Total (Net Incl. SPR)	4.4	3.9	3.6	3,5								
Average for Four-Week Pe	riod Endin	a,										
1982	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/0		
Crude Oil (Excl. SPR)	2.5	2.5	20						7/2	7/9	·	
SPR	0.2	0.2	2.9	3.0	3.2	3,5	3,2	3,8	R3.9 -	3.9		
Refined Products	1.3	1.3	0.2	0.2	0.2	0.2	0.2	0.1	0,1	0.1		
Fotal (Gross Incl. SPR)	4.0	4.0	1,4	1.3	1.2	1.2	1:.2	1.1	1.2			
Total Exports	E0.8		4.4	4,4	4.6	5.0	4,6	5.0		5.2		
Total (Net Incl. SPR)	3,2	E0.8 3.1	E0.8	E0.8	E0.8	E0,9	E0.9	E0.9	E0.8	E0.8		
	V,2	ا , د	3.6	3,6	3.8	4.1	3,7	4.2		4.4		r.

R=El A revision.

E= Estimate based on most recent monthly data available.

1 Includes exports of crude oil and refined petroleum products. Exports of crude oil are prohibited under normal circumstances. Some crude oil is shipped to Canada in exchange on a barrel-for-barrel basis. Shipments of crude oil to Puerto Rico and the Virgin Islands are not prohibited because these territories are U.S. possessions.

• 1980: EIA, "Petroleum Statement, Annual (Final Summary)."

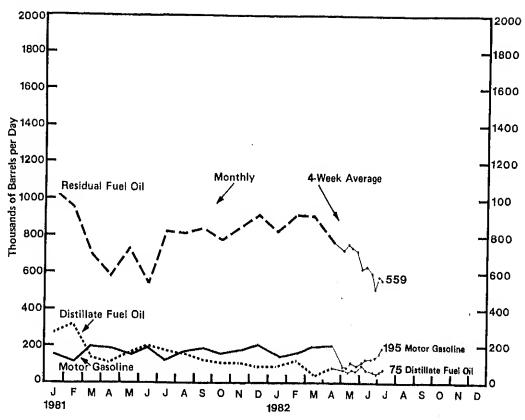
• 1981: EIA, "Petroleum Statement, Monthly."

• January—April 1982: EIA, "Petroleum Supply Monthly."

• May 7, 1982—Current Week: Four-week averages based on EIA weekly data.

Note: Detail data may not add to total due to independent rounding.

# Gross Imports of Petroleum Products by Product (Thousands of Barrels per Day)



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980				741 44/01 21								
Motor Gasoline	141	154	155	155	132	148	149	141	106	152	126	121
Jet Fuel ·	96	43	100	110	73	86	93	67	77	86	63	60
Distillate Fuel Oil	179	237	193	154	126	108	117	77	101	115	133	166
Residual Fuel Oil	1,339	1,122	976	775	812	749	787	875	906	875	1,024	1,025
Other <sup>2</sup>	437	376	333	315	330	323	267	230	343	384	380	438
1981												
Motor Gasoline <sup>1</sup>	152	121	200	195	159	195	124	167	100	4.04	404	
Jet Fuel	12	41	76	56	47	68	35	47	193 45	161	184	210
Distillate Fuel Oil	273	325	144	116	165	201	179	159		14	4	/
Residual Fuel Oil	1,015	956	699	584	735	540	830	819	129	117	114	95
Other <sup>2</sup>	439	462	387	360	331	333	306	380	841	773	844	920
			00,	000	001	555	300	300	403	492	466	474
1982												• •••
Motor Gasoline <sup>1</sup>	158	165	202	208								
Jet Fuel	10	62	39	47								
Distillate Fuel Oil	96	130	48	59				. ·				
Residual Fuel Oil	821	928	910	762	•							
Other <sup>2</sup>	500	456	405	397					•			
Average for Four-Wee	k Period E	indina:										
1982	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9		•
Motor Gasoline <sup>1</sup>	96	87	101	90	107	122	400					
Jet Fuel	42	47	50	18		132	136	148	R163	195		
Distillate Fuel Oil	86	53	71	70	18 95	13	. 5	0	0	0		
Residual Fuel Oil	739	752	748			75	63	59	R67	75		
Other <sup>2</sup>	345	384	390	709 367	626	633	600	518	R582	559		
- we have a	Umi	304	390	307	372	37,6	396	385	R421	431		

R-EIA revision.

1 Includes imports of finished motor gesoline end imports of motor gesoline blending components.

2 Includes imports of kerosene, unfinished oils and other oils,

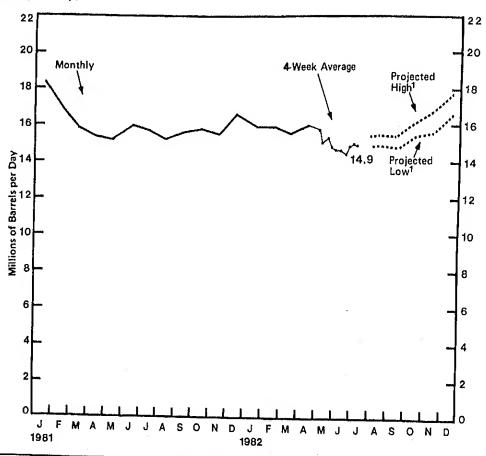
Source: • 1980: EIA, "Petroleum Statement, Annual (Final Summary)."

• 1981: EIA, "Petroleum Statement, Monthly."

• January—April 1982: EIA, "Petroleum Supply Monthly."

• May 7, 1982—Current Week: Four-week averages based on EIA weekly data.

Total Petroleum Products Supplied for Domestic Use (Millions of Barrels per Day)



Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
18.9	18.8	17.4	16.8	16.2	16.2	16.0		•			
18.3	16.9	15.8	15.3	15.2	16.0						18.4
15.9	15.9	15.6	16.0		, 5,0	.0,,	10,2	15,0	15.8	15,5	16.6
		g;									
<u> 5/7</u>	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9		
15.8	15.1	15.4	14.9	14.7	14.6	14,4	14.8	15,0	14.9		
	18.9 18.3 15.9 Ir-Week Peri 5/7	18.9 18.8 18.3 16.9 15.9 15.9 Ir-Week Period Endin 5/7 5/14	18.9 18.8 17.4 18.3 16.9 15.8 15.9 15.9 15.6  Ir-Week Period Ending: 5/7 5/14 5/21	18.9 18.8 17.4 16.8 18.3 16.9 15.8 15.3 15.9 15.9 15.6 16.0  Ir-Week Period Ending: 5/7 5/14 5/21 5/28	18.9 18.8 17.4 16.8 16.2 18.3 16.9 15.8 15.3 15.2 15.9 15.9 15.6 16.0  Ir-Week Period Ending: 5/7 5/14 5/21 5/28 6/4	18.9 18.8 17.4 16.8 16.2 16.2 18.3 16.9 15.8 15.3 15.2 16.0 15.9 15.9 15.6 16.0  Ir-Week Period Ending: 5/7 5/14 5/21 5/28 6/4 6/11	18.9 18.8 17.4 16.8 16.2 16.2 16.0 18.3 16.9 15.8 15.3 15.2 16.0 15.7 15.9 15.9 15.6 16.0 16.0 17-Week Period Ending: 5/7 5/14 5/21 5/28 6/4 6/11 6/18	18.9 18.8 17.4 16.8 16.2 16.2 16.0 15.8 18.3 16.9 15.8 15.3 15.2 16.0 15.7 15.2 15.9 15.9 15.6 16.0 16.0 17-Week Period Ending: 5/7 5/14 5/21 5/28 6/4 6/11 6/18 6/25	18.9 18.8 17.4 16.8 16.2 16.2 16.0 15.8 16.6 18.3 16.9 15.8 15.3 15.2 16.0 15.7 15.2 15.6 15.9 15.9 15.6 16.0  III-Week Period Ending: 5/7 5/14 5/21 5/28 6/4 6/11 6/18 6/25 7/2	18.9 18.8 17.4 16.8 16.2 16.2 16.0 15.8 16.6 17.0 18.3 16.9 15.8 15.3 15.2 16.0 15.7 15.2 15.6 15.8 15.9 15.9 15.6 16.0 17.0 18.4 15.9 15.6 16.0 17.0 17.0 17.0 17.0 17.0 17.0 17.0 17	18.9 18.8 17.4 16.8 16.2 16.2 16.0 15.8 16.6 17.0 16.7 18.3 16.9 15.8 15.3 15.2 16.0 15.7 15.2 15.6 15.8 15.5 15.9 15.9 15.6 16.0  III-Week Period Ending: 5/7 5/14 5/21 5/28 6/4 6/11 6/18 6/25 7/2 7/9

<sup>1</sup> Projected. See Appendix C for explanation of derivation of values.

Source: • 1980: EIA, "Petroleum Statement, Annual (Final Surrmary),"

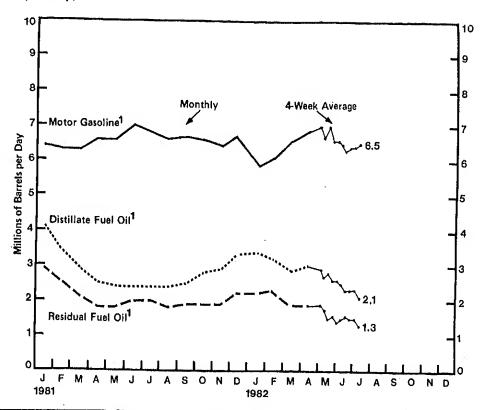
• 1981: EIA, "Petroleum Statement, Monthly,"

• January—April 1982: EIA, "Petroleum Supply Monthly,"

• May 7, 1982—Current Week: Four-week averages based on EIA weekly data.

• Projections: EIA, Office of Energy Markets and End Use (May 1982).

# Petroleum Products Supplied by Product (Millions of Barrels per Day)



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980	** ***							<del></del>	***********			<del></del>
Motor Gasoline	6.3	6.6	6.4	6.8	6,7	6.7	6.7	6,6	6,5	6.7	6.2	6.6
Jet Fuel	1.1	1.1	1,1	1.1	1.0	1.1	1.1	1.0	1.1	1,0	1.0	1.1
Kerosene	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0,1	0,1	0.1	0.1	0.2
Distillate Fuel Oil	3.7	3.7	3,2	2.6	2.4	2,3	2.2	2.1	2,6	2.9	2.9	3,6
Residual Fuel Oil	3.1	3.1	2.7	2.4	2,2	2.3	2.3	2,3	2.4	2.2	2,5	2.7
Other	4.4	4,1	3,8	3.7	3.8	3.7	3.5	3,5	4.0	4.0	3,9	4.2
1981												١.
Motor Gasoline <sup>1</sup>	6.4	6.3	6,3	6,6	6.6	7.0	6.8	6,6	6.7	6,6	6,4	6.7
Jet Fuel	1.1	1.0	1.1	1.0	0,9	1.0	1.1	1.0	1.0	0.9	1.0	1.0
Kerosene	0.2	0,2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Distillate Fuel Oil	4.1	3,4	2.9	2,5	2.4	2,4	2.4	2.4	2.5	2.8	2.9	3,3
Residual Fuel Oil <sup>1</sup>	2,9	2.5	2.1	1.8	1.8	2.0	2.0	1.8	1.9	1.9	1.9	2.2
Other	3,7	3,5	3,2	3.3	3.4	3.4	3.3	3,2	3.4	3.5	3,2	3.2
1982												
Motor Gasoline <sup>1</sup>	5,9	6.1	6.6	6,9								
Jet Fuel	1.0	1,1	1.0	1.0								
Kerosene	0,2	0.2	0.1	0.1								
Distillate Fuel Oil	3.4	3,2	2,9	3.0								
Residual Fuel Oil	2.2	2.3	1.9	1.9								
Other	3.2	3.2	3.1	3.2		•						
Average for Four-Wee	k Period	Ending:										
1982	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9		
Motor Gasoline <sup>1</sup>	7.0	6,7	7.0	6,6	6.6	6.5	6.3	6.4	R6.4	6.5		
Jet Fuel	1.0	1.0	1,0	0.9	0.9	0.9	0,9	1.0	1.0	1.0		
Kerosene	0.2	0.1	0.1	0,1	0,1	0.1	0.1	0.1	0.1	0.1		
Distillate Fuel Oil <sup>T</sup>	2.9	2.7	2.8	2.6	2.6	2.5	2,3	2.3	R2.3	2.1		
Residual Fuel Oil <sup>1</sup>	1.9	1.8	1.5	1.6	1.4	1.5	1,6	1.5	R1.5	1.3		
Other	2.9	2.7	3.0	3.0	3,1	3.1	3.2	3.6	3.6	3.8		

Á=EIA revision.

The Land Revision.

1 Products supplied statistics for 1981 and 1982 should not be compared with those for prior years because, in January 1981, EIA modified its definitions for motor gasoline, distillate fuel oil, and residual fuel oil. See Appendix D for further explanation,

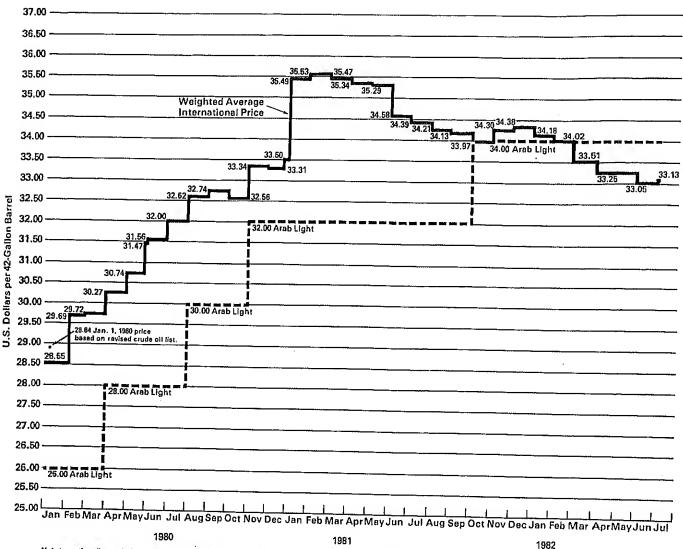
Source: • 1980: EIA, "Petroleum Statement, Annual (Final Summary),"

• 1981: EIA, "Petroleum Statement, Monthly,"

• January—April 1982: EIA, "Petroleum Supply Monthly,"

• May 7, 1982—Current Week; Four-week averages based on EIA weekly data.

### World Crude Oil Prices1 (Dollars per Barrel)



 $oldsymbol{
u}$  internationally traded cil only. Average price (FOB) weighted by estimated export volume.

Note: Beginning with the May 1, 1981 issue of the Weekly Petroleum Status Report, the world crude oil price is based on a revised crude list. Additions: Saudi Arabia's Arabian Heavy, Dubai's Fateh, Egypt's Suez Biend, and Mexico's Maya. Omissions: Canadian Heavy, Replacements: Iraq's Kirkuk Biend for Iraq's Basrah Light.

The above graph shows an estimated world crude oil price based on this revised list beginning January 1, 1981. An asterisk shows the January 1, 1980 price based on the revised list. All other 1980 prices represent the old crude list before revisions.

# World Crude Oil Prices<sup>1</sup> (Dollars per Barrel)

	Type of Crude/ API	_						t Change Price From
ountry	Gravity	Current Price	In Effect 1 Jan 82	In Effect 1 Jan 81	in Effect 1 Jan 80	In Effect 31 Dec 78	In Effect 1 Jan 80	In Effect
PEC							1 Jan 60	31 Dec 78
audi Arabia	Arabian Light 34 <sup>0</sup> (Bench mark crude)	34.00	34.00	32.00	26.00	12.70	30.8	167,7
bu Dhab; ubai itar in, iq iwalt iwalt iwtral Zone gerla gerla jya ionesia neon uador  tal OPEC <sup>3</sup>	Saudi Borri 39° Arabian Heavy 28° Murban 39° Fateh 32° Dukhan 40° Iranian Light 34° Kirkuk 36° Kuwait Blend 31° Khafji 28° Saharan 44° Bonny Light 37° Es Sider 37° Minas 34° Tia Juana 26° Mandji 29.6° Oriente 30°	34.52 31.00 34.56 33.86 34.49 31.20 34.83 32.30 31.03 35.50 35.50 35.50 35.40 32.88 34.00 34.25	35.40 31.00 35.50 33.86 35.45 34.20 34.93 32.30 31.03 37.00 36.50 36.50 35.00 32.88 34.00 34.25	33.52 31.00 36.56 35.93 37.42 37.00 37.50 35.50 40.00 40.78 35.00 40.78 35.00 40.06	27.52 25.00 29.56 27.93 29.42 230.00 29.29 27.50 27.20 33.00 29.97 34.50 27.50 27.50 28.20 28.30	13.23 12.02 13.26 12.64 13.19 13.45 13.17 12.22 12.03 14.10 15.12 13.68 13.65 12.72 12.59 12.35	25,4 24,0 16,9 21,2 17,2 4,0 18,9 17,5 14,1 7,6 18,5 14,1 27,3 30,5 21,4 2,2	160.9 157.9 160.6 167.9 161.5 132.0 164.5 164.3 157.9 151.8 134.8 156.6 168.3 168.5 170.1
n-OPEC				04.02	28.30	13.03	18.6	157.6
ited Kingdom rway // /pt /pt ian ia aysia nei .S.R.5 al Non-OPEC 3	Forties 36.5° Ekofisk 42° Mexican Light 32° Mexican Heavy 22° Suez Blend 33° Oman 36° Suwadiyah 26° Miri 38° Seria 36.5° Export Blend 33° NA	33,50 34,25 32,50 25,00 32,60 34,30 30,00 35,60 35,10 31,20 31,93	36.50 37.25 35.00 26.50 34.00 35.00 30.00 36.50 36.10 35.49 34.35	39.25 40.00 38.50 34.50 40.50 37.50 36.03 41.30 40.35 39.25 38.54	29.76 32.50 32.00 28.00 34.00 30.28 31.39 33.60 33.40 33.20 31.94 28.84	14.00 14.20 13.10 NA 12.81 13.06 11.64 14.30 14.15 13.20	12.6 5.4 1.6 10.7 -4.1 13.4 -4.4 6.0 5.1	139.3 141.2 148.1 NA 154.5 182.8 157.7 149.0 148.1 136.4
ted States 6	NA	32,99	34.15	36,69	28.84 29.35	13.08 13.38	14.9 12.4	153,9 146.6

v=Not Applicable.

Yficial sales prices or astimated term contract prices; spot prices excluded.

Ya higher at 60 deys' credit.

Yearage prices (FOB) weighted by estimated export volume.

In 60 days' credit.

Yearage delivered cost to Northwest Europe.

Yearage prices (FOB) weighted by astimated import volume.

Irce: • DOE, Office of international Affairs, July 14, 1982.

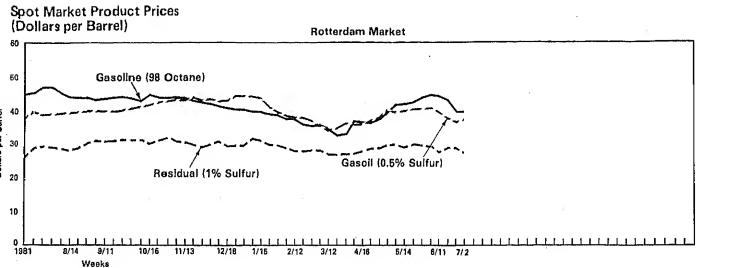
• Platt's Oligram Price Report.

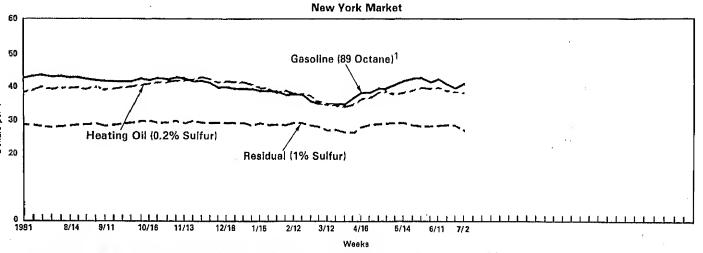
• Petroleum Intelligence Weekly.

• Oil Buyers' Guide,

• Europe Oil Prices,

434.





1 The prices shown through September 25, 1981 are for 94 octane gasoline rather than for 89 octane gasoline.

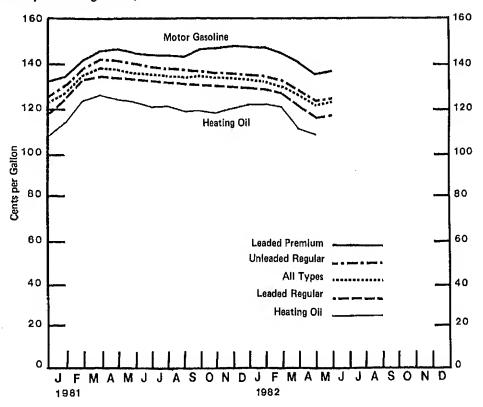
Source: • Oil Buyers' Guide, Weekly Oil Market Product Report.

• DOE, Office of International Affairs.

		Motor	Gasoline	Gasoil/	Heating Oil <sup>1</sup>	Residual	Fuel Oil <sup>2</sup>
		Rotterdam (98 Octane)	N.Y. <sup>3</sup> (89 Octane) <sup>5</sup>	Rotterdam (0.5% Sulfur)	N.Y. <sup>4</sup> (0.2% Sulfur)	Rotterdam (1% Sulfur)	N.Y. <sup>3</sup> (1% Sulfur)
:1 Jul	3	44.96	42.42	37.53	38.22	25.98	27.00
	10	44.96	42.84	37.53	38.22	25.98	28.50
	17	46.37	43.22	39.75	39.06		
	24	46.66	43.34			28.98	28.50
	31	46.72		38.61	39.48	29.05	28.25
Aug	7	45.37	42.97	38.40	39,35	28.90	27.75
Aug			43.05	39.07	39.48	28.68	28.00
	14	44.31	42.80	39.07	39.48	28.15	28.00
	21	43.90	42.80	39.68	39.90	28.53	28.60
_	28	43.85	42.13	39.86	39,27	29.88	28.50
Sep	4	43.32	41.94	40.08	39.38	30.41	28.50
	11	43.73	41.87	39.68	39.06	30.41	28.15
	18	43.90	41.73	39.75	39.42	30.93	28.25
	25	43.90	41.83	39.68	39.48	31.01	28.80
Oct	2	43.73	41.83	40.62	40.00	30.86	29.25
	9	43.14	41.98	41.09	40.64	30.63	29.50
	16	44.67	41.87	42.09	41.03		
	23	44.37	42.29	42.43		30.03	29.85
	30	44.26	42.40		41.06	30.93	29.80
Nov	6	44.20		42.83	41.48	30.41	29.25
IVOV	13		42.71	43.23	41.69	30.48	29.75
		43.32	42.15	43.16	41.90	30.33	29.90
	20	42.79	41.54	43.70	41.90	29.65	29.90
_	27	42.73	41.54	43.10	42.59	28.83	29.10
Dec	4	42.15	41.03	43.57	42.10	29.88	29.90
	11	41.03	39.61	42.83	41.16	30.41	29.00
	18	41.03	39.82	43.16	41.48	29.20	29.00
	24	40.50	39.50	44.57	41.48	29.50	29.00
2 Jan	8	39.98	39.67	44.30	40.42	31.68	28.40
	15	38.68	38.72	43.57	39.90	30.78	29,00
	22	38.57	38.93	40.88	39.38	29.50	28.35
	29	38.22	38.30	39.21	38.22	29.73	28.70
Feb	5	37.22	37.67	38.40	38.54	28.68	28.50
	12	37.22	37.61	37,87	37.90	27.93	29.25
	19	35.93	37.61	37.87	37.80	27.93	29.25
	26	35.52	35.72	37.00	37.38	28.08	28.50
Mar	5	35.46	34.88	35,32	35.28	28.08	20,00
	12	34.41	34.57	34.38	33.60	26,95	
	19	32.42	34.55	34.99	34.02	26.50	
	26	32.83	34.52	36.13	34.06	26.65	
Apr		36.64	36.54	35.52	04.00	20.00	
Whi	2 9	36.17	38.01	35.02 3E 73			
	10	36,64		35.72			
	16		38.22	36.66			
	23	37.51	39.69	37.87			
	30	39.57	39.40	39.68			
May	7	41.68	40.53	38.81			
	14	41.85	41.87	39.21			
	21	42.67	42.29	40.21			
	28	43.79	42.61	40.35			
Jun	4	44.37	41.68	40.55			
	11	44.08	42,21	39.34			
	18	43.08	40.66	37.60			
	25	39.57	39.56	36.53			
	25	39.86		37.27			
Jul	')		40.07	3171			

<sup>1</sup> Refers to No. 2 Heating Oil.
2 Refers to No. 6 Oil.
3 East Coast Cargoes.
4 Navy York Heator Reseller Berge Prices.
5 The prices shown through September 25, 1981 are for 94 octane gasoline rather than for 89 octane gasoline.
Source: • Oil Buyers' Guide, Weekly Oil Market Product Report.
• DOE, Office of International Affeirs.
Note: Spot Market Product Prices for July 9, 1982 are not available. See the Highlights page for explanation,

### Average Retail Selling Prices Motor Gasoline and Residential Heating Oil (Cents per Gallon, Including Taxes)



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1980				***								
Motor Gasoline												
Leaded Premium	114.9	123.2	127.7	129.2	129.5	130,0	130,7	131.0	130.4	129.9	130.1	131.0
Leaded Regular	108.6	115,9	120,2	121.2	121.5	121.7	121.6	121.0	119.7	118.8	118.8	- 119.7
Unleaded Regular	113,1	120.7	125.2	126.4	126,6	126.9	127.1	126.7	125.7	125,0	125.0	125.8
All-types	111.0	118.6	123,0	124,2	124.4	124.6	124.7	124.3	123,1	122.3	122.2	123.1
Residential Heating Oil	8,08	95.3	97.1	97.4	97.2	97.9	97.9	97.9	98.1	98.7	101.0	106.9
1981												
Motor Gasoline												
Leaded Premium	133.8	141,0	144.9	145,1	144.7	144.6	144.6	144.4	145.6	145.7	146.2	146.0
Leaded Regular	123.8	132.1	135.2	134.4	133.3	132,4	131.5	131.0	130.5	129.9	129.7	129.3
Unleaded Regular	129.8	138.2	141.7	141.2	140.0	139.1	138,2	137.6	137.6	137.1	136.9	136,5
All-types	126,9	135.3	138.8	138.1	137.0	136,2	135.3	134.8	135.8	135.3	135.1	134.8
Residential Heating Oil	114.4	123.4	125,5	123.9	122.7	120.9	121.0	119.4	119.7	118.8	120.8	122.0
1982												
Motor Gasoline												
Leaded Premium	145.6	143.8	140,7	136,8	137,9							
Leaded Regular	128.5	126.0	120.6	114.8	116.6							٠.
Unleaded Regular	135.8	133,4	128,4	122.5	123.7							
All-types	134.1	131.8	126.8	121.0	122.4							
Residential Heating Oil	122.0	120.7	115.3	P113.2								
toologities trouting on	,											

P=Preliminary.

Note: Motor gasoline data include prices from self-service stations. Beginning with September 1981, the Bureau of Labor Statistics has changed the weights used in the calculation of average motor gasoline prices. In the "all types" category gasohol is now included, and unleaded premium is weighted more heavily.

Source: 

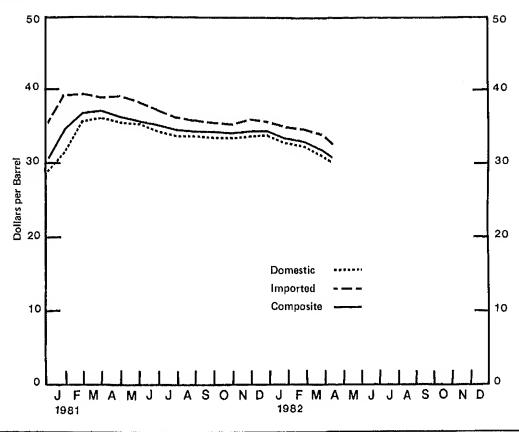
Motor Gasoline—Bureau of Labor Statistics, See definitions for description of survey.

Residential Heating Oil—Through October 1980: Form EIA—9, "No. 2 Heating Oil Supply/Price Monitoring Report."

November 1980 Forward: Form EIA—9A, "No. 2 Distillate Price Monitoring Report."

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# Refiner Acquisition Cost of Crude Oil Dollars per Barrel)



Year/Type	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
1980				22								
Domestic	19.78	21.22	22.07	22.89	23,63	24.48	25,05	24,98	25.37	26.21	26.51	28.55
Imported	30,75	32.40	33.42	33,54	34.33	34.48	34.51	34.44	34.46	34.63	35.09	35,63
Composite	24.81	26.11	26.88	27.09	27.85	28.80	28.73	28.70	28.96	29.56	29.79	31,39
1981												
Domestic	32.71	36.27	36.97	35.58	35.21	34,20	33.76	33.79	33.47	33.48	33,49	33,51
Imported	38.85	39,00	38.31	38.41	37.84	37.03	36.58	35.82	35.44	35,43	36,21	35,95
Composite	34.86	37.28	37.48	36.58	36.11	35.03	34.70	34.46	34.11	34.07	34,33	34.33
1982												
Domestic	33,39	32.71	31.08	R30,27								
Imported	35.54	35,48	34.07	R32.82								
Composite	33,95	33,40	31.81	R30.83								

R=EIA revision.

Source: • 1980: ERA Form 49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report."

• January 1981 Forward: Form EIA-14, "Refiners Monthly Cost Report."

# Weather Summary (Population Weighted Cooling Degree-Days 1)

The weather for the nation, as measured by population-weighted cooling degree-days from January 1, 1982 through July 11, 1982, has been 5.2 percent cooler than normal and 18.4 percent cooler than last year.

### U.S. Total Cooling Degree-Days (Population Weighted)

				Percent Change		
	1982 This year	1981 Last year	Normal	This year vs. Last year	This year vs. Normal	
January 1 - July 11	460	563	485	-18.4	-5.2	
January 1 - December 31	Balance of the Control of the Contro	1,291	1,191			

Cooling degree-days for a given location on a given day are the number of degrees that the mean temperature (average of daily maximum and minimum temperatures) that day is above 66°F. Cooling degree-days give a rough measure of the demand for air conditioning.
 Source: National Oceanic and Atmospheric Administration, Department of Commerce.
 U.S. Census Bureau, 1974 Population Estimates.

# Appendix A: EIA Weekly Data: Survey Design and Estimation Methods

The Weekly Petroleum Reporting System (WPRS) comprises five surveys: the "Refinery Report" (EIA-161); the "Bulk Terminal Stocks Report" (EIA-162); the "Pipeline Product Stocks Report" (EIA-163); the "Crude Oil Stocks Report" (EIA-164); and the "Imports Report" (EIA-165). The EIA weekly reporting system was designed to collect data similar to those collected under the monthly Joint Petroleum Reporting System (JPRS) and the monthly imports system. In the WPRS, selected petroleum companies report weekly data to EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product Imports. On the Forms EIA-161 through EIA-164, companies report data on a custody basis. On the Form EIA-165, the importer of record reports each shipment entering the United States. Current weekly data and the most recent monthly data from the JPRS are used to estimate the published weekly totals.

#### Sample Frame

The sample of companies that report weekly in the WPRS was selected from the universe of companies that report monthly in either the JPRS system or the ERA-60 system (for imports). All sampled companies report data only for facilities in the 50 States and District of Columbia. The EIA-161 sample frame includes all petroleum refineries in the United States and its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and bulk terminals that blend motor gasoline. The EIA-162 sample frame includes all bulk terminal facilities in the United States and its territories that have total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The EIA-163 sample frame includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate and intracompany pipeline movements. Pipeline companies that only transport natural gas liquids are not included. The EIA-163 frame. Only those pipeline companies which transport products covered in the weekly survey are included. The EIA-164 sample frame consists of all trunk pipeline companies in the United States and its territories which transport crude oil, all refining companies, all crude oil producers, all terminal operators, end all storers of 1,000 barrels or more of crude oil. The EIA-165 sample frame includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico.

#### Sampling

The sampling procedure used for the weekly system is the cut-off method. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous period. Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers about 90 percent of the total for the previous time period.

	Refiners (Refineries)	Bulk Terminals	Pipellnes	Crude OII Stock Holders	Importers
Weekly Form	EIA-161	EIA-162	EIA-163	EIA-164	EIA-165
Monthly Frame Size	186(347)	173	65	296	955
Waekly Sample Size	84(215)	93	65	111	61

### **Collection Methods**

Data are collected by mall, mailgram, telephone, Telex, and Telefax on a weekly basis. All canvassed firms and terminal operating companies must file by 5:00 p.m. on the Monday following the close of the report period, 7 a.m. Friday. During the processing week, compeny corrections of the prior week's data are also entered.

#### Estimation and imputation

After the company reports have been checked and entered into the weekly data base, ratio estimates of the weekly totals are calculated from the reported data. First, the current week's data for a given product reported by companies in that region are summed. (Call this weekly sum, W<sub>s</sub>). Next, the most recent month's data for the product reported by those same companies are summed. (Call this monthly sum, M<sub>s</sub>). Finally, let M<sub>t</sub> be the sum of the most recent month's data for the product as reported by all companies. Then, the current week's ratio estimate for that product for all companies, W<sub>+</sub>, is given by:

$$W_t = \frac{M_t}{M_s} \cdot W_s$$

This procedure is used directly to estimate total weekly inputs to refineries and production. To estimate a products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimate a summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Under suc ratio method is known to result in large errors. Hence, a number of other procedures for estimating weekly sidered. The average ratio method was selected for estimating imports because it produces estimates that we mark values computed from monthly data. Estimates are obtained using the ratio method, but with each omitted from the sample. These estimates are then averaged to obtain the average ratio estimate.

Since  $M_{\bullet}$ , the total of the most recent month's data, includes companies which may not have responded weekly, of estimation automatically imputes for nonresponse.

#### Response Rates

The response rate as of the day after the filing deadline is about 80 percent for the EIA-161; 75 percent for percent for the EIA-163; 80 percent for the EIA-164; and greater than 95 percent for the EIA-165. Howeve received the next day, bringing the final response rates up. Late respondents are contacted by telephone. Near companies report on time. The nonresponse rate for the published estimates is usually between 2 percent and 5

# Appendix B: Interpretation and Derivation of Average Inventory Levels

The charts displaying inventory levels of total petroleum products (p. 7), crude oil (p. 7), motor gasoline (p. 9), distillate fuel oil (p. 11), and residual fuel oil (p. 13) have been revised. This revision is meant to provide the user with the current data, and e summary of data from the most recent three year period running from January through December or from July through June. This summary takes the form of an "everage range." These curves also include seasonal variation determined from a longer time period.

These curves will be updated every six months in March or October by basing the "average ranges" on a more recent time period. At that time, each three year data series will be adjusted by dropping the oldest six months and including the most recent six months.

For each data series, the monthly seasonal factors were estimated by means of e seasonal adjustment technique developed at the Bureau of Census (Census X-11). The seasonal factors were assumed to be stable (i.e. unchanging from year to year) and additive (i.e., the series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported inventory levels). The intent of deseasonalization is to remove only annual variation from the data. Thus, a deseasonalized series would contain the same trends, cyclical components, and irregularities as the original data. The seasonal factors for total petroleum (crude end products), distillate fuel oil, and residual fuel oil were derived using monthly data from 1974-1980. For motor gasoline, the seasonal factors were based on monthly data from 1976, 1978, 1979, and 1980. In 1977 there was virtually no seasonal behavior in motor gasoline stocks. Monthly stock levels stayed at the same high level for the entire year. In addition, the seasonal patterns in 1974 appeared to be different from those in recent years. It was assumed that the seasonal patterns in 1974 and 1977 were not representative of the recent past. Therefore, these years were not used in the determination of seasonal patterns for motor gasoline stocks.

Because of these differences in the year-to-year seasonal fluctuation of motor gasoline, the evidence for the illustrated seasonal patterns for total petroleum (crude and products), crude oil, distillate fuel oil, and residual fuel oil is stronger than is the evidence for the illustrated seasonal petterns for motor gasoline.

In some cases, these seasonal patterns do not show a smooth transition from month to month. For example, the June factor for residual fuel oil is slightly less than the May and July values, making a bump in the curve. As there is little difference in the magnitude of these seasonal factors, it is possible that this variation is due to the small number of observations (7 years) and the data variability.

After seasonal factors are derived, the most recent three-year period (from January through December or from July through June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard error of the deseasonalized 36 months is calculated edjusting for extreme data points as described below. The width of the "average range" is twice this standard error.

The upper curve of the "average range" is defined as the average plus the standard error plus the seesonal factors. The lower curve is defined as the average minus the stendard error plus the seasonal factors.

The flat curves labeled "minimum operating inventory" for crude oil, motor gasoline, distillate fuel oil, and residual fuel oil, were derived by the National Petroleum Council and were published in "Petroleum Storage and Transportation Capacitles" in December 1979. In that document, minimum operating inventory is described as follows:

Inventory below this level is not available for consumer use because it is required to fill pipelines, tank bottoms end refinery process equipment; facilitate blending to meet product specifications; prepare for planned maintenance periods; handle unavoidable but anticipated emergencies; and sustain uninterrupted operations. Runouts and shortages would begin to occur if inventory were to fall below this level.

The flat curve labled "observed minimum" for total petroleum stocks is based on the lowest inventory level observed during the three-year base period. The National Petroleum Council did not derive a minimum operating inventory level for total petroleum stocks.

For crude oil, motor gasoline, distillete fuel oil, and residual fuel oil, the observed minimum and the minimum operating inventory are quite close. Hence, it is thought that the observed minimum is a reesonable proxy for the minimum operating inventory.

# Appendix C: Projection of Products Supplied from the Short Term Energy Outlook

The projections of "high" and "low" total petroleum demand, shown in the WPSR as products supplied, are from the EIA Office of Energy Markets and End Use, May 1982 Short-Term Energy Outlook (Outlook).

Three distinctive forecast cases are presented in the May 1982 <u>Outlook</u> based on differing assumptions about the world price of crude oil. In case 1, it is assumed that world crude oil prices fall to an effective OPEC marker price of \$28 per barrel by the end of 1982. In case 2, Imported crude oil prices are stable at April levels through 1982. In case 3, crude oil prices rise at two times the U.S. rate of inflation. Macroeconomic inputs are based on a forecast from Data Resources, Inc. (DRI CONTROL 042782).

The "high demand" case is formed by adding the case 1 (low price) forecast of total demand to the square root of the sum of the squared increases in demand resulting from the following changes in key variables: (1) a 5 percent increase in heating degree-days over the base case, (2) an 8 percent increase in cooling degree-days over the base case, (3) a 0.8 percent increase in income over the base case, and (4) an 11 percent decrease in new car efficiency from the base case. The "low demand" case is formed by subtracting from the case 3 (high price) forecast the square root of the sum of the squared decreases in demand resulting from decreases from the base case for heating degree-days, cooling degree-days, and income; and a 12 percent increase over the base case in new car efficiency.

For detailed information on the assumptions used in the forecast methodologies, please refer to the published report, Short-Term Energy Outlook, May 1982.

Copies of the report are available from:

National Energy Information Center Room 1F-048, Forrestal Building 1000 Independence Avenue, S.W. Washington, D.C. 20585 Telephone: {202} 252-8800

### Appendix D: Changes in Reporting of Monthly Data-January 1981

In January 1981, new forms were introduced for the collection of monthly data in the Joint Petroleum Reporting System. At that time, several major changes were made in the reporting of motor gasoline, distillate fuel oil, and residual fuel oil. The reporting changes were made to describe industry operations more accurately. However, because of the changes outlined below, the monthly information shown in the WPSR for 1981 and 1982 should not be directly compared to information for prior years. The series affected by the January 1981 changes are products supplied and production of motor gasoline, distillate fuel oil, and residual fuel oil,

#### Motor Gasoline Changes

Prior to 1979, the EIA product supplied series for motor gasoline was consistently lower than the gasoline sales information collected by the Federal Highway Administration. There were two major reasons for the difference. First, refinery operations particularly the flows of unfinished oils and the redesignation of some finished products, were not being accurately described on the EIA survey forms. Second, a large amount of gasoline was being produced away from refineries at "downstream blending stations" to take advantage of provisions in regulations governing the amount of lead that could be added. These blending stations were not reporting gasoline production to the EIA prior to January 1981.

In January 1981, blending stations were added as reporters of motor gasoline production, and the reporting forms and definitions were changed to reflect more accurately the flow of products at refineries. For a further description of these changes and an indication of the magnitude of the difference between the old- and new-basis series, see Note 4 in the "Explanatory Notes" of the "Petroleum Supply Monthly."

#### Distillate and Residual Fuel Oil Changes

The monthly statistics on production and product supplied of distillate and residual fuel oil for January 1981 forward reflect actual reported data even though these fuels can be further processed after initial distillation. The figures for prior years were adjusted to reflect the renaming or reclassifying of distillate and residual fuel oils as unfinished oils. Reclassification of these fuels might occur when a refiner ships a distillate or residual fuel oil to another refinery or to a bulk storage facility and the receiving facility, intending the oils to be processed further, reports the receipt of this fuel as a receipt of unfinished oils. Before January 1981, production statistics for distillate and residual fuel oils were adjusted to compensate for this problem on the basis of the difference between reported receipts and shipments of unfinished oils. Of the difference, two-thirds was allocated to distillate and one-third to residual. This adjustment was dropped in January 1981. Instead, the production statistics and products supplied estimates now reflect the data as reported. Monthly figures for total petroleum product supplied will not be affected by the change, however, because of an adjustment for "reclassified" product now shown in the monthly balance. The adjustments made in 1980 are shown in the table below. For further information about these changes, see Note 4 of the "Explanatory Notes" in the "Petroleum Supply Monthly."

Adjusted and Unadjusted Production of Distillate and Residual Fuel Oils by Month for 1980 (Thousand Barrels per Day)

		Distillate Fuel Oil	Residual Fuel Oil				
Month	Adjusted	Unadjusted	Difference	Adjusted	Unadjusted	Difference	
January	3,013	3,093	80	1,771	1,812	41	
February	2,766	2,888	122	1,773	1,836	63	
March	2,557	2,690	133	1,584	1,652	68	
April	2,460	2,554	94	1,595	1,643	48	
May	2,474	2,610	136	1,509	1,579	70	
June	2,646	2,721	75	1,575	1,613	38	
July	2,689	2,783	94	1,480	1,528	48	
August	2,461	2,582	121	1,444	1,506	62	
September	2,686	2,726	40	1,495	1,516	21	
October	2,589	2,650	61	1,512	1,543	31	
November	2,703	2,823	120	1,579	1,641	62	
December	2,891	3,052	161	1,660	1,743	83	
Average	2,661	2,764	103	1,580	1,634	54	

Source: EIA, "Petroleum Supply Monthly," March 1982.

# Appendix E: Calculation of World Oil Prices (page 19)

The weighted average international price of oil, shown in the "Highlights" and on page 19, is an average calculated using specific crude oil prices weighted by the estimated crude oil export volume for each oil-producing country. To develop the table shown on page 19, a list of major oil producing/exporting countries was chosen. For each country, the official selling price of one or more representative crude oils was determined by investigating a number of industry publications (i.e., "Oil Buyers' Guide," "Platt's Oilgram Price Report," "Petroleum Intelligence Weekly," and "Europe Oil Prices") and by contacting oil market analysts.

Then, the appropriate crude oil volumes to be used as weighting factors for each country were determined. These volumes are estimates based on a number of sources which provide data on production, consumption, and exports for these countries. Export volumes for a number of smaller producing/exporting countries, not listed in the table, are included in the weighting factors. After the export volumes had been determined, simple mathematical weighted averages were calculated to arrive at the "Total OPEC," "Total Non-OPEC," and "Total World" prices.

The average United States (FOB) import price is derived by the same basic procedure as the world oil price, that is, taking the representative official crude oil price of a specific crude oil from a particular country and weighting this price by a certain volume of crude oil. In this case, the weighting factors are the volumes of crude oil imported into the U.S. from pertinent countries. Import volumes from a number of smaller producing/exporting countries, not listed in the table, are included in the weighting factors.

Both the import and export volumes are preliminary. Due to their origin, these estimates cannot be fully verified. These volumes are updated monthly, or more frequently when changes in oil market conditions make updating appropriate.

### **Definitions**

- Barrels throughout the report are 42-gallon barrels.
- Crude Oil Inputs. The total crude oil put into processing units at refineries. Crude oil inputs are a measure of the performance level of refineries and give an indication of the quantity of raw material actually being made into products such as gasoline, distillate fuel oil, and residual fuel oil.
- Distillate Fuel Oils (No. 1, 2, and No. 4 fuel oils and No. 1 and No. 2 diesel fuels) are light fuel oils used primarily for home heating, as a diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and for electric power generation.
- EIA Weekly Data. These are preliminary figures based on data supplied to the EIA by selected petroleum companies; published figures include estimates for other, non-sampled companies based on currently available monthly data. Weekly data indicate broad trends such as increases or decreases in demand or production.
- Imports are defined in this report as gross imports. Imports of crude oil do not include imports to the Strategic Petroleum Reserve. Imports of minor products ("other oils"), as shown on page 15, include aviation gasoline, kerosene, unfinished oils, liquefied petroleum gases, plant condensate, petrochemical feedstocks, lube oils, waxes, special naphthas, coke, asphalt, and other miscellaneous oils.
- Monthly data for 1980 are from EIA, Energy Data Reports, "Petroleum Statement, Annual (Final Summary)." 1981 data are from the "Monthly Petroleum Statement;" 1982 data are from the "Petroleum Supply Monthly." Information on stocks, product supplied, and production of refined products are collected from a universe of refiners, operators of bulk terminals, and pipeline operators. Companies supply monthly data after their records are finalized.
- Motor Gasoline, Included are finished leaded gasoline, finished unleaded gasoline, blending components in the gasoline range, and gasohol. This definition applies for data beginning with the week of January 30, 1981.
   Gasohol was not included in the motor gasoline definition before that date. Motor gasoline imports do not include gasohol.
- Refinery Capacity Utilization is the ratio of the total amount of crude oil, unfinished oils, and natural gas plant liquids run through crude oil distillation units to the operable capacity of these units. In the period 1979-1981 the refinery capacity utilization for all U.S. refineries ranged between 87 percent and 65 percent. The ratio for an individual refinery may fluctuate much more depending on the type of crude and other raw materials processed, the type of products produced, and the operating conditions of the refinery.
- Retail Motor Gasoline Prices. The motor gasoline prices shown are calculated monthly by the Bureau of Labor Statistics (BLS) in conjunction with the construction of the Consumer Price Index (CPI). These prices are collected in 85 urban areas selected to represent all urban consumers—about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini, and self-service).
- The refiner acquisition cost of crude oil is the average price paid by refiners for crude oil booked into their

- refineries in accordance with accounting procedures generally accepted and consistently and historically applied by the refiners concerned. Domestic crude oil is that oil produced in the United States or from the outer continental shelf as defined in 43 USC Section 1131. Imported crude oil is either that oil reported on Form ERA-51, the "Transfer Pricing Report," or any crude oil which is not domestic oil. Prices do not include price of unfinished oils or SPR.
- Residual Fuel Oils. (No. 5 and No. 6 Fuel Oils) are heavy oils used primarily for electric power generation, for industrial and commercial space heating, as a ship fuel, and for various industrial uses.
- Stock figures shown here are for those stocks held at refineries, in pipelines, and at bulk terminals with a capacity over 50 thousand barrels. Stocks held by product retailers and resellers, as well as tertiary stocks held at the point of consumption, are excluded. Stocks of individual products held at gas processing plants are excluded. All plant stocks were included in "Other Oils" and "Total."
- Stock Change (Refined Products). The product stock change shown on the U.S. Petroleum Balance Sheet for the current 4-week period is calculated in the following way: an average daily stock change is calculated for major refined products (i.e., all actual reported stocks); this stock change is added to an estimate for minor product stock change based on historical monthly data; a daily average stock change for refined product stocks for the 4-week period is then calculated. To calculate minor product stock change, the stock levels shown for other oils in the stock section of the balance sheet are used. These other oils stock levels are derived by: 1) computing an average daily rate of stock change for each month based on monthly data for the past six years; 2) using this daily rate and the minor stock level from the most recent monthly publication to estimate the minor product stock level for the current period.
- Product Supplied is a calculated value computed for specific products by adding domestic production plus net imports (imports less exports), less the net increase in primary stocks. Total Products Supplied is calculated as inputs to refineries, plus estimated refinery gain, plus other hydrocarbon input, plus product imports, less product exports, less the net increase in product stocks.
- The United States encompasses, for the purpose of this report, the 50 states and the District of Columbia, Data for the Virgin Islands, Puerto Rico, and other U.S. territories are not included in the U.S. totals.
- Unaccounted-for crude oil is a term which appears in U.S. Petroleum Balance table. It reconciles the difference between data (or estimates) about supply and data (or estimates) about use. Its value can be positive or negative since it is a balancing term. As it appears in the monthly publications, it reflects the accuracy of the reported data on crude oil imports, production, stocks, refinery input, losses, exports, and transfers (crude oil burned directly as fuel oil). It reflects the quality of the estimates as well as the accuracy of the reported data. Because the unaccounted-for crude oil figure reflects the accuracy of reported and estimated figures, one would expect the figure to be larger in balances using preliminary or estimated data and smaller in balances using the final data. In fact, the published figures confirm this expectation. In the WPSR, fourweek averages for the previous year are interpolated from final monthly data, so that the unaccounted-for crude oil value for the previous years is considerably smaller than that for the current period.



Energy Information Administration U.S. Department of Energy